ABSTRACT OF A

Lecture

ON

LATERAL LITHOTOMY.

Delivered at the London Hospital, May, 1881,

BY H. A. REEVES,

SURGEON TO THE EAST LONDON CHILDREN'S HOSPITAL, SURGEON TO THE ROYAL ORTHOPÆDIC HOSPITAL, ASSISTANT-SURGEON AND TEACHER OF PRACTICAL SURGERY AT THE LONDON HOSPITAL, ETC.

GENTLEMEN,—It is very rarely, even in countries and districts where stone in the bladder is comparatively common, that a surgeon has the prospect of operating on three cases in one day; but such was my fortune when I took charge of my senior's wards during his indisposition, which I am sure you will agree with me in hoping may prove a short one. At that time there were two cases of vesical calculus in his wards, and one under my care at the East London Hospital for Children. All of them were boys, the youngest under three, the eldest six; and, somewhat curiously, I had at the same time two other cases of vesical symptoms in boys at the Children's Hospital, but in them repeated sounding had failed to discover a stone. It may be that some other trouble of the urinary organs or adjacent parts, or some reflex condition, may yet be discovered to explain the symptoms in the last-named cases, and I merely mention them now as affording another instance of those curious occurrences which for lack of knowledge of that higher law that shall include them, we call coincidences.[1] One of the little lads in this hospital took measles, and was temporarily discharged before I came on duty, but we hope he will soon be readmitted, and be in a fit condition for operation.

I need not detain you with lengthy notes of the cases, as there is nothing special in the symptoms from which these boys suffered, but I should tell you that the first lad you saw me operate on was six years old, and small for his years, and that the second was three years, and a little child even for that age. I mention these facts because as a rule the smaller the child the smaller are the parts in which one operates; and as a consequence, but inversely, the greater the difficulty. I hope the time is not far distant when this disagreeable word "difficulty" will be able to be expunged from the surgical dictionary. True it is that surgeons have done much in the last thirty years to simplify operations and to render their consequences infinitely more satisfactory, and I wish to add my mite in the same direction.

There can be no question that lithotomy has always been considered a difficult operation, as every work on Surgery, whether special or general in any language, draws particular attention to its difficulties; and, moreover, many surgeons of eminence have devised various methods and apparatus in order, as they thought, to simplify the proceeding. Furthermore, several well-known surgeons of undoubted ability and practical skill have had the candour to publish cases of dangerous *contretemps* and mishaps which have befallen them; and I wish you to make particular mental note of this, because it would be a grave error on your part or on the part of anyone who led you to believe that so-called accidents in lithotomy or other great surgical operations occur only to the young or inexperienced. Inexperience, nervousness, and let me add, conceit, are important factors in bringing about a mishap in any major operation; but the very opposites of these states have not sufficed their possessors to avoid mischance and its consequent anxiety. When I say mischance do not imagine that I wish to imply that the element of chance or luck has much to do with the operation itself,[2] although some surgeons have been unlucky enough to get a run of bad cases—i.e., cases in which the urinary organs were in a bad condition, and the results of their operations were consequently unsatisfactory; but I use the word as perhaps a befitting one to express the undoubted fact that difficulties in lithotomy and other operations have happened, do occur, and will again arise in the most experienced hands at some stage or other of the proceedings. This may appear as strange to you as it is true, and its truth may be tested not only by a fairly long record of such cases, but by others which you may hear of, and yet others which you may see. I do not think it so strange that difficulties or accidents should sometimes occur to the experienced, because when a surgeon earns a reputation in any particular branch of our profession he gets cases of all kinds of gravity, and is frequently operating, therefore by the inevitable law of probability and being at best but a fallible human being his time of distress must, as it always has, come. I do not wish in any way to discourage you, or to suggest any greater excuses for those difficulties or worries every surgeon meets with in his operative career, or to use the *tu quoque* style of argument as applied to other operators, more than the facts of the case admit. *Qui s'excuse s'accuse* has been said with a large percentage of truth, and, moreover, the mistakes of others will not justify, though they may perhaps palliate, yours; and I have chosen to say so much on this subject of difficulty in the operation, for in the future, should you have to perform it, I trust you will not undertake it lightly, because I wish you to judge others as you would wish to be judged yourselves, and principally because I believe I have devised a simple plan of operating which will, with a little practice on your part, rob the operation of its terrors and risks.

Perineal lithotomy is about the only operation in the whole range of surgery which is performed, as it were, in the dark. Hitherto one has had only the sense of touch to guide one, and although very experienced lithotomists may smile contemptuously at the suggestions which I have to offer, and, by the way, I anticipate sneers from the very inexperienced, too, because, you know, conceit and ignorance are boon companions; nevertheless, I earnestly urge you to avail yourselves of every opportunity to practise on the cadaver the two methods of operating, mine and the usual one, and to judge, without prejudice, as to which offers the safer, and, therefore, the better guide into the bladder. At any rate my method is, to say the least of it, a good training for the ordinary mode, as a few cases operated on by the plan I am about to describe will give you confidence in doing without it should you think proper.

I propose to make lateral lithotomy, in the main, a daylight operation; it is not necessary to make the way into the bladder entirely open to the eye, but this can readily be done if it be wished, without in any way doing damage to the patient or prolonging the operation, and I shall be delighted if I can at all establish the fact that lithotomy can be, and has been, made easy, because the easier any operation is made the better is it for the patient, and the surgeon's anxiety is very much reduced.

It is not enough, gentlemen, for any teacher to tell you, "Yes, it is true there are difficulties special to lithotomy, but they are not insuperable, and only bunglers come to grief." Your reply to such a statement should be not only that there is plenty of evidence that it is not only bunglers and inexperienced operators who have had accidents, but even supposing that false premiss were granted, is it not a gain that any operative procedure should be so simplified that a beginner may undertake it with confidence? The experienced may do without it, but they, as well as you, will do better with it, and should anyone reply that no difficulty during their operations, or unfortunate result consequent on them, has ever occurred in their practice, you will not be very far out in telling them this little anecdote. A man entered the office of a well-known society paper and asked to see the editor. On being ushered into the august presence, he inquired, "Is it true that they have revised the New Testament?" "Yes," was the reply. "Have they left in the story about Ananias and Sapphira?" "I don't know," the editor answered. "Well, you had better see to it, as it

[1] I have recently had two cases of calculus impacted in the urethra in boys within three or four days of each other. There was a double coincidence in these cases, the first being their coming closely together in point of time, and the second being the seat at which the calculi were fixed—namely, just in front of the scrotum. As they could not be extracted with the urethral forceps, I cut down on them in the middline, and as the treatment and result were very satisfactory, and quite different from what the books lead one to expect, I shall say more about them on another occasion.

[2] I have on three or four occasions seen surgeons withdraw the staff before the bladder has been entered, but in all of them they, or their assistant, had the good luck to be able to reintroduce the staff and complete the operation. Perhaps this may justly be considered lucky, because other operators have not succeeded in getting the staff again into the bladder, and may possibly be regarded as unlucky.

is important for you!" The querist evidently did not think highly of that editor's veracity. The long and short of the whole matter is this, that mistakes do and must occur, and the greatest surgeon may be, like the greatest general was said to be, the man who makes the fewest mistakes; and if any man should infer that he is infallible, answer him in the spirit, if not in the exact words, of Mr. Stevenson in his recent admirable work, "Virginibus puerisque," and say that he has not wit enough to acknowledge himself sometimes a fool.

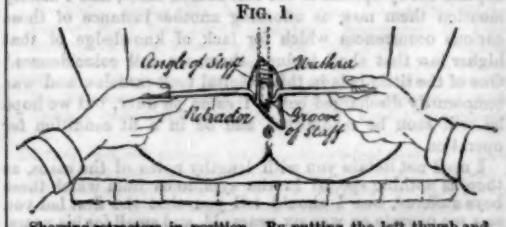
We have had more than sufficient of that word *difficulty;* let us now endeavour to make it surgically obsolete, and at the same time to cultivate the correct understanding of a much more comfortable word, *charity*, and give it every legitimate practical effect in our dealings with our fellow-practitioners. *Apropos* of this, I commend to your perusal some excellent remarks by Mr. Erichsen in the chapter devoted to Lithotomy in his well-known work on Surgery.

Before describing to you verbally that which many of you saw me do, I will say a few words on the treatment of stone in the bladder. A calculus having been detected, the sooner it is got rid of safely the better for the patient, although cases of great tolerance of the bladder in the presence of a calculus are on record, and I well recollect a case in the post-mortem room years ago in which, on opening the bladder of a boy to insert a stone prior to practising lithotomy, I found a calculus already there, and the bladder in a fairly healthy condition. The child had died in the medical wards, and there had not been any complaint or indication to lead the attendants to suspect that there was any vesical irritation. Such cases are quite exceptional, and must be practically disregarded; and as litholysis or the dissolution of stones in the bladder by medicines administered by the mouth, or by injections into that organ, has not yet succeeded to any extent, one has only lithotrity or lithotomy to fall back on. The former operation in children, although much more extensively practised in France than here, has not at present yielded sufficiently encouraging results to allow it to be compared with lithotomy. Although I believe, from what I have seen and read of the operation, as improved by Bigelow, that lithotrity or litholapaxy, with rapid evacuation of the fragments, will ere long entirely supersede lithotomy in adults,—yet at the time of speaking there is nothing better than lithotomy to suggest to you in the treatment of stone in children. I am, of course, speaking of calculus in the male. Well, then, we must extract the stone by lithotomy—that is, we must "cut for the stone," as the old writers have it, and the only question is, which is the best method of doing it. There are, as you know, various modes, such as the median, supra-pubic, rectal, &c., and each has its partisans, but the balance of evidence is undoubtedly in favour of the lateral operation, whatever the conditions, a very large calculus being excepted, and then the supra-pubic is the best. Some very eminent surgeons recommend the supra-pubic as the best in all cases, and although I have had occasion to perform it in the case of a very large stone which it would have been impossible to remove through the perineum, and which it was difficult to extract even by this method, it being firmly adherent by its outer layer to the bladder walls; and although the operation is easy, the results, so far, are not encouraging enough to make me recommend it to you. It certainly has one advantage which, as far as I know, has not yet been pointed out, and it is that one can make sure that no stones are left in the bladder. As the urethra, prostate, and neck of the bladder are not interfered with, there is little risk of permanent incontinence of urine, and none of stricture and sterility, but it has special risks of its own, not the least of which is pelvic cellulitis.

My best way, I think, will be to recall to your minds the steps of the operation as you saw me execute them. The boy having been anæsthetised, I sounded, and having struck the stone, I passed a No. 6 rectangular catheter-staff, and again ascertained the presence of the calculus, then injected the bladder with half a pint of warm water. I prefer a rectangular staff and as large a one as the urethra can safely be made to hold, because the angle can readily be felt in the perineum before and during the operation, because it offers a straight guide into the bladder, and because a large staff distends the urethra and carries a groove more readily felt, and one in which it is easier to keep the knife during its passage onwards. In the second case a No. 6 passed easily, and I might have passed a No. 8 or 9 in the boy aged six. As you saw, there was not the least difficulty in passing the instrument, and if you pass it in the manner I did, from the left side of the patient, keeping the handle to the left until you get the end of the staff sufficiently far in the urethra to permit of the turn which will bring it safely into the bladder, there will usually be no difficulty in introducing it, and no fear, if you be gentle, of making a false passage.

While the staff was held in position the patient was tied up in the usual manner, and the pelvis was raised so that my eyes, when sitting, were on a level with the centre of the perineum. The penis and scrotum being well drawn up, I then made the usual first incision with this knife, which I had made specially, and which, please, observe. It cuts quite up to the point, and on its back, rather more than an eighth of an inch from the tip, is an ovoid button sufficiently large to be well held by the groove of the staff, and not large enough to impede the lateral inclination which I gave it before pushing it onwards to the bladder. One or two deeper incisions were made, and then I placed these retractors in position, one on either side of the wound. I then passed my finger till it rested just beyond the angle of the staff, and, guided by it, cut till I exposed the groove and lodged the knife in it; then, being sure, by the senses of touch and sight, that I was in the right track, I steadily and firmly pushed the knife home to the stop in the staff, and taking its handle in my left hand, I gradually depressed it, pushing it up and in with the knife, which was in the stop. The staff was then replaced, and as I withdrew the knife I kept it in its lateralised position and slightly enlarged the wound in the neck of the bladder and perineal tissues on its way out. Notice, please, that I not only cut *into* but also *out of* the bladder, and in my humble opinion this should always be done, if executed with care and the requisite amount of anatomical knowlege. If this step of

FIG. 1.



Showing retractors in position. By putting the left thumb and index-finger on their angles, they may be made to follow the knife inwards; but this manœuvre is not necessary. The wound is represented unusually large, in order to show clearly the plan of the operation.

the operation be properly performed there is no fear of having too small an opening, and thus leading to the risks of not entering the bladder, or pushing it away from the urethra, or making a pouch with the finger between it and the rectum. In the second case on which I operated about an hour after cutting the one of which I am speaking, I did not incise quite so freely, because the child was only half the size—viz., three,—and I did not feel justified in using the knife with the same freedom, and the result was that I had to enlarge the wound, which would only admit the tip of my index-finger, with a blunt-pointed bistoury. This only delayed the operation about a couple of seconds, and in both cases I caught the stone at once with the forceps, in the right axis, and readily extracted. The calculus in the first case was double the size of that in the second, and both were ovoid uric-acid calculi. In the second case a little *contretemps*, of no moment to the life of the patient, occurred, the nature of which I will explain to you presently. In the first case my index-finger had just room to pass comfortably into the bladder, and if care be taken that this be always the case I believe all the difficulties connected with entering the bladder and extracting the calculus will be overcome. Always feel the stone with your finger before withdrawing the staff, and be not alone satisfied with feeling, but endeavour to do that which I did in these cases, and have it beneath the pulp of your finger, and keep it there before passing the forceps or scoop on to it. In both cases I tried at first to extract with my right index-finger in the rectum. However, I did not waste a moment directly I felt it was not quite easy, but introduced a small pair of calculus forceps, and you saw how easy the extraction was. In the first case I passed my finger into the bladder between the groove of the staff and the neck of the bladder, and in the second I found it easier to get my finger in above the staff. I men-

tion this because some writers lay stress on the way in which you are to pass your finger into the bladder. In my view it is of little moment, because if you have made the opening at the vesical neck sufficiently large your finger will have no difficulty in following the groove of the staff into the bladder. There will be no fear of making a pouch with your finger in the loose tissue beneath it. You will have noticed that there was no bleeding in either case, and there is every reason to believe they will both do well. [Both cases recovered very satisfactorily.]

A few words about one or two of the preliminary steps: I allude to injection of the bladder, which some writers do not think necessary, and to pulling up of the penis and scrotum. I think the bladder should be fairly distended, because the weight of the water helps to steady it, because the recto-vesical pouch of peritoneum is pushed up (although this should not be in danger, yet it has been wounded more than once), because, as these cases tend to show, the walls of the bladder do not always collapse over the stone after the urine gushes out, and also because the base of the organ is brought lower down when it is moderately distended. The pulling up of the penis and scrotum is valuable because this proceeding stretches the urethra over the groove of the staff; it pulls the vesical neck lower down, and the urethral bulb is drawn up out of the way of the incision. The pulling up of the scrotum has the advantage of rendering the skin tense, of facilitating the first incision, and of permitting the angle of the staff to be better felt before operating.

The difficulties, then, of perineal lithotomy are, as you have now made out, threefold: first, to find the groove of

FIG. 2.

Showing the method of fixing the stone at the neck of the bladder, and seizing it with the forceps. The back of the knife, with the catch attached, is shown. At 2 is the transverse section of this catch, and at 3 is a similar section of the staff, showing the arrangement to prevent the knife slipping from the groove. I have had a thick layer of rubber put over the edges of the stop of the staff, to prevent the knife being chipped.

the staff; second, to keep the knife safely in the groove, and push it steadily on to the stop at the vesical end of the staff; and, third, to extract the calculus. I have demonstrated to you practically, as well as described theoretically, how these are to be overcome; but I wish to explain to you some further steps which I was prepared to adopt in order to render every step of the operation as safe and simple as possible. These retractors, which are of a somewhat special shape, I had made for these operations, and if I had wished I could, with my thumb and finger, have pushed them gradually onwards towards the vesical orifice on either side of the staff, so as not only to obtain a view of the groove in the greater part of its extent, but, if necessary, to pass one of them along the groove into the bladder after the knife was withdrawn, and then by turning the handle to the floor I could have stretched the vesical opening enough to allow of the introduction of the index-finger. In fact, had the opening not been of sufficient size, and had I not liked to have made further use of the knife, I should have had three courses open to me, as the Premier is so fond of saying. I could have adopted the plan just described, or passed a grooved director, and then my finger between it and the staff, or have guided a pair of dressing forceps along the groove; and if I could not insinuate my finger between it and the staff, and had chosen to dilate, I could have done so with the forceps, and perhaps have got my finger in between its expanded blades. But these plans are best avoided, and they can be, by not being afraid of cutting with due judgment, skill, and anatomical knowledge; and if you have once made sure that you are in the groove, a bold incision is one—perhaps the greatest—secret of successful and brilliant lithotomy, always assuming that the cut does not exceed the limits which experience has approved.

The *contretemps* in the second case to which I alluded arose in this way. The knife was very blunt, and I had to change it, moreover I had again to change to enlarge the opening, and in withdrawing the knife I unfortunately made an opening into the rectum, but that is now dealt with, and I trust the wound will unite, especially if the bowels be kept quiet.[2] This accident has occurred in better hands than mine; still, it ought not to happen. I again warn you against it, but if you extract the stone safely, and therefore successfully, such a complication, which is not at all serious to the life of the patient, need not much disturb you, although if the wound do not heal, an annoying fistula, difficult to close, may result. I must not omit to mention that you must have a thoroughly reliable assistant, and one who will hold the staff steadily and safely in the bladder, and not let it slip out of that organ or deviate from the middle line. My senior, Mr. Rivington, was an invaluable assistant.

I think I have said all I had to say; and let me hope, gentlemen, that this brief and imperfect record of some of the difficulties, dangers, and anxieties which I have experienced, and which have also unfortunately fallen to the lot of many other surgeons more eminent than I can hope to be, may lead, should a similar fate befall you, not to permanent discouragement, but to that better and more determined frame of mind which shall, in good time, carry you over difficulties on to success. I dare not venture to believe that even with the best preparation and intentions you will be free from mistakes, or from grave anxieties, first on account of your patient and then on your own behalf; but whether you escape such calamities or not, remember always that to err is but to be human, to forgive is to imitate the divine. Prepare yourselves by frequent practice on the dead subject, see all the operations you can, and then do your best when the opportunity arises.

ON A FORM OF

DYSPEPSIA OCCURRING IN INFANTS.

BY ARTHUR HILL HASSALL, M.D. LOND.,

LATE SENIOR PHYSICIAN TO THE ROYAL FREE HOSPITAL; FOUNDER OF AND CONSULTING PHYSICIAN TO THE ROYAL NATIONAL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.

IN addition to the ordinary classification of dyspepsia, based upon leading symptoms and conditions, there is yet another classification which might with advantage be adopted, to one or other division of which many cases of indigestion and bowel derangement occurring in infants, children, and adults might be referred. Thus there is one form of indigestion characterised by inability to digest with facility nitrogenous matters, and more particularly certain kinds of such matters. Many people cannot digest albumen, especially in the raw state, it often giving rise in the case of egg albumen to severe tormina; and, again, others cannot digest casein. Passing to the non-nitrogenous aliments there are many people who cannot digest fatty substances, others starchy or saccharine matters. On these data a really natural classification of several well-marked forms of indigestion might be based.

In the present communication I propose to deal with that form only which arises from the inability on the part of an infant to properly digest the casein of milk. A particularly fine infant had no other nourishment given it than its mother's milk for the first four months; during the whole of that period it was in the habit of throwing up after nearly every feeding a large quantity of coagulated casein, and the same was passed by stool in still greater amounts. The stools were almost colourless, with occasional patches of yellow or green; they were frequent, often very offensive, and there were constant attacks of distressing flatulent colic. Although so much casein was expelled without being digested, still the child was fairly

[2] I laid the wound open into the rectum on the following day, and passed two deep stitches, and the little boy made an excellent recovery without a fistula.

nourished, and its general health suffered much less than might have been expected, yet it did suffer, and increasingly, so that the conclusion was arrived at that it was better to wean the child. This was done, and it was next fed upon the milk of a single selected cow, properly diluted with water; this was given for some time, but with still worse results. Masses of casein, large enough almost to choke the child, were frequently thrown up; the stools, little else than casein, were perfectly white, and almost destitute of bile. The milk was changed several times for that of other cows, but no improvement took place. The motions were frequent, often immediately following the feeding. At length diarrhœa set in, the evacuations were very liquid, and on one or two occasions, when more solid, they were tinged with blood. Various remedies were employed, but without anything more than slight benefit, as antacids, carminatives, anodynes, and, lastly, astringents. The milk was boiled before being given, and diluted to a very considerable extent, but none of these means were effectual in putting a stop to the ejection of the undigested casein. Having regard to the large size of the masses of casein vomited, it was difficult to imagine that they could, in so bulky a form, be dissolved and digested, and it occurred to me that if the casein were broken up in the stomach into small particles, digestion would then much more readily follow. The child being between five and six months old, a mixture of malt and wheat flours, sugar, milk and water, properly mixed and prepared, was now given. The effects were immediate and most satisfactory; the looseness and colic ceased, the motions became of soft consistence, of a natural and uniform yellow colour, and quite inoffensive. Now, this change in the child's condition was certainly not due to simple reduction in the amount of the casein given, for this had been tried before without avail; but it was brought about, I believe, by the alteration in the physical condition of the casein effected by its admixture with the starchy matter contained in the food, whereby the casein was reduced to such minute particles as readily to allow of the solvent action of the gastric juice. I am confirmed in this view by what I have observed to happen in some cases where egg albumen fails to be digested, and gives rise to violent tormina. I have long had a case under my observation in which the most painful consequences result from eating cooked or uncooked eggs, or even the smallest quantity of egg in a sauce or ice. But this same individual can take eggs or the white of them with impunity provided they have been broken up by mixing and cooking with flour. Very young infants have no doubt a difficulty in digesting starchy matters, but I am inclined to think that this difficulty has been a good deal exaggerated, and has often prevented small quantities of farinaceous food being given when they would have been very serviceable. In the case related, the stools were specially tested several times for starch, very small quantities of which only were found. But it may be said, since malt flour was used, that the starch was transformed into sugar before the food was given; this would, however, only be true to a certain extent. I have made trial of nearly all the so-called "malted" foods now in the market, following strictly the methods of preparation described, but I have invariably found that a very large proportion of the starchy matter remains untransformed into maltose. It should be understood that what are called malted foods contain for the most part simply a proportion of malt flour, the foods themselves not having been subjected to any malting process.

Although in the present communication I have only referred to a single case, the form of dyspepsia described is of very common occurrence in infants during the period of lactation. I may mention, in conclusion, that on one occasion, the child being perfectly well, the flour was suspended for a day or two, and milk-and-water only given; this was speedily followed, as before, by the ejection of the curd, and attacks of tormina.

San Remo.

SANITARY INSTITUTE OF GREAT BRITAIN.—The announcement of the award of the prize of £200, offered by the Rev. E. Wyatt Edgell for an essay on the "Range of Hereditary Tendencies in Health and Disease," will be made by the adjudicators at the first ordinary meeting of the institute for the session 1881–82, which will be held on Wednesday, Dec. 7th, at 7.45 P.M. The inaugural address will be delivered by Dr. Alfred Carpenter.

GASTROSTOMY.

WITH TWO CASES IN WHICH THE OPERATION WAS PERFORMED FOR MALIGNANT STRICTURE OF THE ŒSOPHAGUS.[1]

BY A. F. McGILL, F.R.C.S.,
LECTURER ON ANATOMY AT THE LEEDS SCHOOL OF MEDICINE.

OF the two following cases, one was successful and the patient is still alive, nearly four months after the operation; in the other, death occurred on the seventh day.

CASE I.—MRS. L——, aged thirty-six, was first seen by me on July 4th, 1881. She was suffering from well-marked symptoms of malignant stricture of the œsophagus, which was situated at the junction of the pharynx and œsophagus behind the cricoid cartilage. In this position the new growth could be felt. No instrument could be passed beyond this point. She was greatly wasted, but otherwise her condition was fairly good. She had first noticed difficulty in swallowing solids twelve months previously. For the last three months she has taken nothing but liquids; the quantity taken has gradually decreased, till now she is unable to take more than half a pint of nourishment in the twenty-four hours. As a consequence she complains much of hunger and of a burning thirst. Under the circumstances of the case it seemed to me that there was no time for delay. I consequently advised gastrostomy, and, the patient being willing, performed the operation on July 6th. The patient being placed under ether, and the carbolic spray playing on the part to be incised, an incision two inches in length was made from the left linea semilunaris outwards for about two inches parallel to the costal cartilages, and distant from them half an inch. The small amount of bleeding that occurred being stopped by torsion, the peritoneum was opened for the same length. The greater curvature of the stomach with the omentum attached was exposed, and the anterior surface of the stomach about an inch from the curvature was attached to the abdominal wall by thirteen thin silver-wire sutures. The piece of stomach visible after the stitches had been inserted was about one inch in diameter. The wound was then dressed with salicylic silk.—July 10th: Has not lost strength since the operation. Has been fed with Slinger's nutrient suppositories, one of which has been given every four hours. They have all been retained with the exception of one, which was returned with a motion. The patient has also sucked a considerable quantity of ice, administered to allay the burning thirst, and yesterday she swallowed a few teaspoonfuls of iced milk. She has been much troubled by pain in the seat of the wound, which has been aggravated by coughing; for this small doses of morphia have been administered. Her temperature was 100° the morning after the operation, since then it has been normal. To-day the stomach is opened by a small crucial incision made with a tenotomy knife. Some slight difficulty was experienced owing to inability to fill the stomach well. A piece of india-rubber tubing was introduced, and four ounces of milk and egg injected by a Higginson's syringe. From this time the progress was in every way satisfactory. Peptonised milk was substituted for a few days for the milk and egg as it was found that this caused considerable pain, and was apparently not digested. The sutures were removed at intervals, the last on July 12th. On this day an india-rubber tracheotomy-tube was introduced through the abdominal wound into the stomach. Into this tube a glass funnel was inserted when it was necessary to give food; liquids were poured down it, and meat and bread finely divided were pushed into the stomach by means of a bougie or a piece of stick. The patient gained strength rapidly, and three weeks after the operation was able to sit up, and go downstairs. About this time her breathing became heavy and laboured, owing to the malignant growth pressing on the larynx. In August I was away from Leeds, and my friend, Mr. Robson, kindly took charge of the patient for me. On Aug. 17th he found her suffering from extreme dyspnœa, caused apparently not only by direct pressure, but also by spasm of the glottis. He performed tracheotomy with immediate relief. Since then she has gone on with comparative comfort, but it is evident that owing to the

[1] Read before the Leeds and West Riding Medico-Chirurgical Society

rapid extension of the disease in the neck life cannot be prolonged very much longer.

CASE 2.—Mrs. S——, aged fifty-six, was seen by me for the first time on Sept. 20th. She has been fairly healthy, though not robust, all her life. In May last she had an attack of diarrhœa but did not think much of it, as she had been liable to similar attacks in the spring of the year for several years past. The diarrhœa has continued with greater or less severity till the present time. At the beginning of July she first noticed difficulty in swallowing solids. For the last six weeks she has suffered a good deal of discomfort from the regurgitation of food which she has attempted to swallow. The stricture is easily recognised as being of the same nature and in the same position as that described in the former case. No instrument could be passed. The general condition of the patient was not very favourable, as she was extremely feeble, and looked much older than her real age. As, however, she was rapidly sinking, I advised gastrostomy. She hesitated for a time, so that the operation was not performed till Oct. 4. The steps of the operation were the same as those described in the other case, with, however, the following variations. The incision was not so long, extending for about one inch and a half. It was made through the skin by drawing it upwards over the rib and cutting down on this firm support. The opening in the peritoneum was only one-half the length of the cutaneous wound. It was found that eight sutures were sufficient to fix the stomach firmly in position. The incision into the stomach was linear, about a quarter of an inch in length. A few words will suffice for the after history of the case. She went on fairly well for the first four days, but did not retain all the enemata and nutrient suppositories that were administered, and her temperature varied from 100° to 101°. After her stomach was opened and food administered she complained of much pain in the lower part of the abdomen. She gradually lost strength and died on the seventh day.

A post-mortem examination of the abdomen was made sixteen hours after death. The peritoneum was found to be entirely free from inflammation, the stomach at the seat of operation was firmly attached to the abdominal wall, and four of the sutures which had not been removed had not been passed through the mucous membrane into the cavity of the stomach. The opening in the stomach was situated on its anterior surface one inch above the greater curvature and three inches and a half from the pylorus.

Remarks.—The operation can be conveniently discussed under three heads—1st, the incision of the skin; 2nd, the insertion of the sutures; and 3rd, the opening of the stomach.

1. *The skin incision* has varied considerably in the practice of different surgeons. Thus, Durham advised a vertical incision three or four inches in length over the upper part of the left linea semilunaris. Sédillot made a crucial incision, passing through the upper part of the left rectus. More recently Bryant describes the incision which he made in two cases as "an oblique one about three inches long and half an inch below the borders of the left ribs." The incision which I used is that recommended by Labbé. An anatomical examination of the region shows it to be the correct one. In the dead body it is found that the anterior wall of the stomach when undistended touches the abdominal parietes in a triangular space, bounded above on the left side by the costal margin, on the right side by the edge of the liver, and below by a line drawn from some part, usually the centre, of the ninth costal cartilage transversely outwards to the liver. This is an almost constant condition, and is only interfered with when the left lobe of the liver is considerably enlarged. The liver usually touches the costal margin on the left side, behind the left linea semilunaris, at a point which lies over the eighth cartilage. It consequently follows that it is useless to prolong the incision through the rectus muscle, and thus expose the liver, as mentioned in Mr. Bryant's report of his case, but that the most advantageous incision is one about an inch and a half in length from the outer border of the rectus, parallel to the cartilage of the eighth and ninth ribs, and half an inch below them, extending towards the apex of the tenth cartilage. This last-mentioned point is easily recognised, as it forms a distinct projection movable on the ninth cartilage, to which it is attached by a broad ligament. It is therefore a valuable landmark, which enables us to fix with precision the position of the stomach in its relation to the abdominal wall. We must, moreover, remember that during life the diaphragm is never so much curved as after death, and that consequently the stomach will be situated lower in the living subject than in the dead, making the actual operation easier than that performed on the dissecting-room subject.

2. *The insertion of the sutures* is a most important step in the operation, as the safety of the patient depends on the firm union of the stomach to the abdominal wall. All recent authors seem to agree that the sutures must be numerous and close together; they are, however, divided in opinion as to whether they should be inserted through the whole thickness of the abdominal wall, including the peritoneum, or whether they should be attached to the skin only. I followed the former course, for the following reasons. The stomach being attached to the abdominal wall, against which it normally lies in its empty condition, there can be no strain on the stitches, and the wound enjoys the greatest possible amount of rest; if, on the other hand, the stomach is drawn forwards into the wound, there will be a certain amount of tension which will tend to interfere with early union. Again, the fact that two peritoneal surfaces when brought together by sutures unite speedily has been proved, and is now universally recognised, and is in itself a sufficient reason for adopting this proceeding in the operation under consideration. In my first operation I inserted the first stitch with a curved needle, but found that the ordinary needle in a handle slightly curved was more convenient for the purpose. Whether I passed the needle into the cavity of the stomach or merely into the wall between the mucous and serous coats I cannot say with certainty, but, looking at the great thickness of the wall, I am inclined to think the cavity was not opened. As already mentioned, the four stitches found in position in the second case had not penetrated into the stomach cavity. A small peritoneal wound facilitates the operation; when the stomach is directly below the incision, one three-quarters of an inch in length will be amply sufficient; the stomach can then be seized with forceps, a piece the size of a shilling exposed, and eight or ten stitches will be sufficient to fix it firmly in position.

3. *Opening the stomach.*—In all the early operations, and indeed till quite recently, the stomach was opened at the same time that the first two stages—viz., incision of the abdominal wall and insertion of the sutures—were performed. To Mr. Howse, of Guy's, is, I believe, due the credit of having first improved the operation by delaying the opening of the stomach till the union between the viscus and the abdominal parietes was consolidated. It is plain that this improvement is no small one, removing as it does all fear of extravasation of food or gastric juice into the cavity of the peritoneum. It is probable that this delayed opening is the chief cause to which the improved results of recent over early operations are due. There is only one argument that can be used against it, and that is that the feeble condition of the patient may necessitate the early administration of nourishment. In an exceptional case of this kind it might be necessary to depart from what must now be considered the established rule, and complete the operation at one sitting. In the majority of cases the administration of food by means of nutrient enemata, or nutrient suppositories, will sustain the strength of the patient sufficiently for the four or five days that should elapse before the completion of the operation. As a method of administering food per anum, the suppositories which I used are of the greatest value; they are retained as well as, if not better than, enemata, and are administered with much greater ease, and with less disturbance of the patient. The opening of the stomach, which should be a small one, a quarter or a third of an inch in length, is made without much difficulty. It is advisable to have some mode of fixing the stomach, which otherwise has a tendency to slip back before the knife. With this object Mr. Bryant introduces at the time of the first operation two stitches through the peritoneal surface of the stomach near the centre of the portion attached to the edges of the wound. These serve to steady the parts while the incision is made. I think this proceeding is hardly necessary. In my last case I kept the parts fairly tense by seizing two opposed wire sutures with forceps, and cutting between them. In any future case I shall leave two of the sutures on opposite sides, about the centre of the wound, with the ends long. These, held forward by an assistant, will keep the stomach wall steady and tense, and will no doubt facilitate the completion of the operation. The administration of an anæsthetic is unnecessary, as the incision through the stomach wall is devoid of pain.

As yet gastrostomy may be said to be on its trial; and this

being the case it is, I think, expedient that all operations, successful or otherwise, should be put on record. The experience which has been gained already points strongly to the conclusion that in cases of stricture of the œsophagus, caused by the swallowing of some caustic material, and which will not yield to treatment by the ordinary methods, the operation is not only expedient, but absolutely necessary. The surgeon would be gravely responsible who allowed a patient to die under these circumstances without recommending an operation which will probably be successful, and which if successful will save life. In cases, however, in which the stricture is malignant there is more room for difference of opinion; at any rate, there is no doubt that it is not as yet recognised as an established surgical procedure. Many patients must die annually who have been under treatment in public hospitals in whom no attempt has been made to prolong life and palliate suffering by the formation of an artificial mouth in the stomach. Surgeons have been deterred from operating by the extreme frequency with which a fatal result has supervened. Improved methods of operating have, within the last few years, led to a great change in this respect. Thus in 1879 Verneuil published statistics showing that of thirty cases in which gastrostomy was performed for malignant disease one only survived for a month. Since that date a considerable number of successful cases have been reported. It will, I think, in a short time become as much a matter of course to perform gastrostomy in cases of cancer of the œsophagus as it is now to perform colotomy in the same disease when situated in the rectum. In neither case is the operation, performed with any hope of saving life; in each it answers the same purpose, it alleviates suffering, it prolongs life. When the operation is established in practice it will be done much earlier in the course of the disease than is at present the case. As soon as the diagnosis is clear there is no reason for delay. Then the statistics of the operation will undergo the same change that those of colotomy have done, and from being an extremely fatal operation it will become one attended with but little risk. Mr. Erichsen, in the fifth edition of his Surgery, published in 1869, gives statistics of colotomy, and shows that up to that time of twenty cases in which Amussat's operation was performed in the left lumbar region eleven recovered and ten died. During the year 1880 the same operation was performed ten times in the Leeds Infirmary, and of these cases nine recovered. In the one instance the mortality was 45 per cent., in the other 10 per cent. It is not impossible nor improbable that the statistics of gastrostomy will in future show a like improvement. If this should be the case, the operation will be performed at an early period in suitable cases, and patients will be saved much suffering from the pangs of hunger and thirst.

SOME COMPARATIVE OBSERVATIONS ON THE BLOOD IN CHLOROSIS AND PREGNANCY.

By FREDERICK WILLCOCKS, M.D. LOND., M.R.C.P.,
LATE SAMBROOKE MEDICAL REGISTRAR TO KING'S COLLEGE HOSPITAL.

IT has long been known that the puerperal state is associated with well-marked changes in the composition of the blood. According to the analyses of Becquerel and Rodier and others the blood in pregnancy contains a relatively large quantity of water, the red corpuscles and albuminates of the serum are diminished, and the number of leucocytes is increased. Cazeaux[1] described the pregnant state as one essentially analogous to chlorosis, and more recently Quinquad[2] has pointed out that a progressive fall in the quantity of hæmoglobin in the blood takes place throughout pregnancy. From a normal quantity of about 120 grammes in 1000 cubic centimetres of blood the quantity of hæmoglobin in most pregnant women descends to 67·70 grammes, or even to 62·50 grammes per 1000 cubic centimetres. In healthy pregnant women, he states, however, that the quantity may not fall below 83·54 grammes per 1000 cubic centimetres. To the condition of pregnancy he has accordingly applied the term "chlorose puerpérale." A considerable diminution in the quantity of hæmoglobin in a given volume of blood is undoubtedly present in both pregnancy and chlorosis, but more particularly in the latter. The present series of observations was made partly to determine how far an analogy existed between the well-defined blood change of chlorosis and the blood state of healthy pregnancy, and also to compare more precisely the mode in which the diminution of the colouring matter of the blood, common to both conditions, was produced. The large majority of the present cases were applicants at the out-patient maternity department of King's College Hospital; they were mostly young and fairly healthy, and were mainly selected as having been free from any intercurrent sources of anæmia, such as severe vomiting, frequent abortions, and the like. The method of examination by the chromometer and numerator of Hayem (the latter as modified by Dr. Gowers) was the same as that employed by Dr. Baxter and myself in our former observations on clinical hæmometry, which were published in THE LANCET of March 6th, 13th, and 20th, 1880.

In the following table the cases have been arranged according to the period of pregnancy. The number of red blood-corpuscles per cubic millimetre, and the relative functional value of the individual corpuscle according to Hayem's scale, have also been appended. The standard colour of Gowers' hæmoglobinometer is a somewhat lower tint than the chromometric scale of Hayem which was used in the present observations, and consequently in some cases where comparative observations were made with the two scales, the relative hæmoglobin value of the individual corpuscle was found to be from ·1 to ·2 higher with the former than with the latter instrument.

No. of case.	Age.	No. of present pregnancy.	Miscarriages.	Probable period of present pregnancy.	No. of red corpuscles per cubic millimetre.	Value of individual corpuscle in hæmoglobin.
1	21	4th	1	8 months	4,780,000	·67
2	22	1st	0	8 months	4,780,000	·67
3	22	3rd	0	8 months	4,470,000	·72
4	22	2nd	0	8 months	3,990,000	·71
5	29	7th	0	8 months	3,880,000	·70
—	—	—	—	6 months	4,920,000	·57
6	23	3rd	0	8 months	3,700,000	·76
7	19	2nd	1	8 months	3,610,000	·77
—	—	—	—	7 months	3,770,000	·74
—	—	—	—	6 months	4,000,000	·70
8	20	1st	0	7 to 8 mos.	5,040,000	·60
9	36	8th	2	7 to 8 mos.	4,360,000	·59
10	18	1st	0	7 to 8 mos.	3,770,000	·78
11	24	1st	0	7 months	4,680,000	·62
12	21	4th	2	7 months	4,350,000	·64
13	28	5th	1	7 months	3,970,000	·74
14	30	2nd	0	7 months	3,790,000	·68
15	41	10th	3	7 months	3,780,000	·63
16	21	4th	0	7 months	3,490,000	·77
17	23	2nd	0	6 to 7 mos.	4,320,000	·62
18	27	6th	0	6 months	4,350,000	·63
19	20	1st	0	5 to 6 mos.	5,290,000	·61
20	22	1st	0	5 months	4,560,000	·67
21	19	2nd	0	4 to 5 mos.	3,860,000	·73
—	—	—	—	3 to 4 mos.	4,620,000	·67
22	25	2nd	0	3 to 4 mos.	4,730,000	·71

In the large majority of the above cases there is a more or less decided fall below normal in the number of red blood-cells per cubic millimetre, but the functional value of the individual corpuscle remains high. The total amount of hæmoglobin in a given volume of blood is diminished, but this diminution depends on a general lowering of the number of the red cells in the given volume, and not on any impoverishment of the individual corpuscle. In other words, the red cells are rich in hæmoglobin, but they are diminished in number, and consequently a given volume of the blood in pregnancy will on chemical analysis yield a smaller weight of hæmoglobin than the same volume of normal blood. The observations of Quinquad have shown this to be the case.

In the puerperal state the vascular system undergoes a considerable and progressive enlargement, and assuming that the number and functional value of the red cells of the unimpregnated condition were to remain constant throughout pregnancy, a progressive dilution of the blood would necessarily ensue. Such an assumption will at once explain both the hypocytosis or diminution in the number of the red cells in pregnancy, as well as the absence of hypochrosis or diminution in their functional value. The enormous loss of

[1] Traité de l'Art des Accouchements, p. 481.
[2] Chimie Pathologique, recherches d'hématologie clinique, pp. 239, 250.

blood from which some women suffer during parturition with comparative impunity may be explained on the same hypothesis, the greater serous dilution of the blood permitting the organism to lose a far larger quantity without injury than in the normal, unimpregnated state. These observations, therefore, appear to point rather to an excessive increase of the fluid of the liquor sanguinis in pregnancy than to a condition of pure anæmia, which is usually considered to co-exist with it. It will be noted also that in those cases in which continuous observations have been made for two or three months, a slight progressive fall in the number of the corpuscles has taken place. The white cells of the blood did not appear to have undergone any decided increase in my own observations. In twenty-two cases in which they were counted there was an average of about 1 white to 595 red corpuscles; the highest number was 1 white to 184 red, and the lowest 1 white to 1650 red.

The blood condition of chlorosis is in striking contrast to that of healthy pregnancy. In chlorosis there is always a well-marked impoverishment of the hæmoglobin value of the individual corpuscle. The number of red cells is very variable. They may be almost of the normal standard, or fall considerably below it; but in all cases which have come under my observation before treatment with iron the loss of colour has been far more decided than the diminution in number. Hypochrosis and hypocytosis co-exist in chlorotic anæmia, but the former is always in excess of the latter. A reference to the following cases of chlorosis, where the blood was examined previous to the exhibition of iron, shows at once the relatively low value of the individual corpuscle.

No. of case.	Age.	No. of red corpuscles per cubic millimetre.	Hæmoglobin value of individual corpuscle.
1	19	2,870,000	·37
2	19	2,240,000	·35
3	16	2,460,000	·51
4	22	3,700,000	·50
5	17	4,010,000	·46
6	18	4,140,000	·35
7	16	4,370,000	·46

The foregoing facts appear to warrant the following conclusions:—

1. That a more or less considerable diminution of hæmoglobin is found in both pregnancy and chlorosis, especially in the latter, but that beyond this fact no obvious analogy exists between them.

2. That in pregnancy the diminution of colour is due to a fall in the number of red cells, and that the individual cell remains of high value. In chlorosis both the cells and the individual value are reduced, the latter being in excess of the former.

3. That the blood-state of healthy pregnancy is due to a large relative increase in the water of the plasma, and that this condition does not constitute a true anæmia, but is due to the progressive enlargement of the vascular area during pregnancy.

ON A

CASE OF ANEURISM OF THE ORBIT CURED BY LIGATURE OF THE COMMON CAROTID ARTERY.

BY J. R. WOLFE, M.D.,

OPHTHALMIC SURGEON OF THE GLASGOW OPHTHALMIC INSTITUTION, LECTURER ON OPHTHALMOLOGY IN ANDERSON'S COLLEGE.

ANEURISM of the orbit—pulsating exophthalmos—generally commences with dull pain in the eye and head, with pulsation in the orbit, accompanied with noise in the ear. There is vertigo on attempting to stoop. The eyeball gradually protrudes. Vision is affected according to the amount of dragging upon the optic nerve, and also according to the implication of the ciliary and central vessels in the general vascular dilatation. The finger when applied to the ball communicates pulsation, and the stethoscope at the orbit conveys a distinct *bruit de souffle*, like the puffing of a steam-engine, synchronous with the heart's systole. The exophthalmos progresses, the lids become distended and œdematous, the conjunctiva inflamed, and a circumscribed tumour makes its appearance. If the carotid artery on the same side is compressed, the pulsation ceases, and the tumour is diminished.

Causes.—This disease may be either idiopathic (true aneurism) or traumatic, caused by a blow on the eye or the orbit, or by fracture of the base of the skull. When caused by injury, the aneurism may be either diffused or circumscribed, or may communicate both with an artery and vein (arterio-venous or varicose aneurism).

Seat.—It may be situated in the orbit or within the cranial cavity. Thus, the aneurism may form at the origin of the ophthalmic artery from the internal carotid, may proceed from rupture of the carotid in the cavernous sinus, or may be developed through the obstruction of the venous current within the cavernous sinus.

Travers was the first who, in 1813, recognised pulsating exophthalmos as an aneurism. He described it as an aneurism by anastomosis, and successfully treated it by deligation of the common carotid. He was followed by Dalrymple, who recorded another successful case with loss of vision in 1815. Busk subsequently pointed out that these pulsating tumours were true aneurisms (1839), and this view was supported by Curling. Yet writers continued to describe the disease as aneurism by anastomosis, until Nunneley, who recorded four cases in his own practice, with three successes, by tying the common carotid, brought the view of Busk more prominently forward, and still further developed it (1859). Nunneley regards all orbital aneurisms as either spontaneous or traumatic, and aneurisms by anastomosis as only that which spreads into the orbit from a nævus of the face. The difference is not only a theoretical but also a practical one, for so long as the view that aneurism by anastomosis may be cured by deligation of the carotid remains current, operations may be undertaken with little chance of success. In the treatment of the anastomotic variety, or erectile tumours, injections (lactate of iron, or ergotine) and electro-puncture are more appropriate.

Pathological anatomy has thrown very little light on this affection. Indeed, the few post-mortem sections which have been made are at variance with each other. Thus, whilst Guthrie, Caron de Villards, and Nunneley reported cases in which post-mortem examination revealed the existence of aneurism, in a case reported by Bowman[1] autopsy showed only tumefaction of the dura mater forming the outer wall of the cavernous sinus, and œdema and phlebitis in the interior of the cavernous, circular, and petrosal sinuses. Similar conditions were found in the cases of Morton[2] and Oettingen.[3]

Nélaton, however, was able in two cases to diagnose during life that pulsating exophthalmos was caused by laceration of the carotid artery within the cavernous sinus, and this was verified by the post-mortem sections. Leber, also, has recently diagnosed the existence of laceration of the artery within the cavernous sinus, and has subsequently proved it by autopsy. To these may be added the cases of Blessig and Barron. Ernest Hart, who had a successful case of ligature of the common carotid after failure of digital pressure, describes it[4] as an "arterio-venous aneurism, with cirsoid dilatation of the artery, and probably also of the vein." This description is probably applicable to the majority of cases.

Scientific opinion seems now to have veered round to the view that most cases resemble those of Nélaton's. Thus, Rivington, in his lectures before the College of Surgeons of England,[5] maintains that nearly all traumatic and the greater number of idiopathic cases are due to rupture of the internal carotid within the cavernous sinus.

Aneurism of the orbit is of very rare occurrence. For in the course of seventy years only 106 cases have been recorded in all countries;[6] and when we consider that some of these have proved to be not aneurisms, but pseudo-plasms or erectile tumours in the orbit, we may say in round numbers that it occurred only once a year on an average in all countries. Of the sixty-four cases in which ligature of the common carotid artery has been resorted to, I can gather from Sattler's list that twenty-three were cured with good vision,

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1 Ophthalmic Hospital Reports, 1859.
2 American Journal of Medical Science, 1870.
3 Dorpater Medic. Zeitsch., 1873.
4 THE LANCET, March 15th, 1862.
5 Ibid., April, 1875.
6 See the excellent paper of Sattler in Graefe Saemisch Handbuch vol. vi.

seventeen with loss of sight, ten were failures, and fourteen resulted in death. In idiopathic cases females were in a large majority, and males in traumatic cases. Thus, in twenty-nine cases of idiopathic aneurism, twenty-three were females and six males; while in fifty-seven traumatic cases, forty-four were males and thirteen females. In Great Britain alone twenty-eight cases have been recorded, of which ten were idiopathic and eighteen traumatic, of the former nine were in England and one in Scotland, whilst of the latter fifteen occurred in England and three in Scotland.

The following are the details of a case which was recommended to me by Dr. Frazer of Kilsyth:—

Mrs. M——, aged twenty-two, the mother of two children, of fair complexion, with blue irides, a large nævus of a claret colour on the right temple, and another on the left breast, received a blow on the left eye in February, 1881, when it became blue and the cheek swollen, but there was no pain. Three months later she began to suffer pain, with severe knocking in the head, which was very violent at intervals. She then consulted me, and I found a general dilatation of the orbital tissues and a slight protrusion of the eyeball. There was no pulsation, but a slight bruit was audible in the orbit. Vision was not affected, and there was only hyperæmia of the retina, without change in the vessels. On account of her expected confinement, she did not return till the 11th of October. The eye then protruded considerably; all the tissues of the orbit were highly vascular; the lids (especially the upper) were infiltrated and dilated. The conjunctiva was injected, and the subconjunctival tissue permeated with coarse dusky vessels. The eyeball was pressed downwards and outwards, so that adduction beyond the centre was impossible. A tumour half the size of a walnut was seen near the inner canthus. It was soft and pulsating, and effaceable on pressure; when the finger was applied to the inner angle there was a distinct bruit like that of a telegraph wire, and the stethoscope at the orbit conveyed a puffing like that of a steam-engine. The pulsation was visible at some distance, and her husband says that, when he approached her, he heard from the eye a noise like "the clucking of a hen." When the carotid artery of the same side was compressed the bruit ceased and the tumour was partially effaced.

FIG. 1.

Fig. 1 represents the appearance of the patient on admission. The fundus had then assumed a distinct pathological condition. The ophthalmoscope showed tortuosity and dilatation of the veins to three times their normal calibre, the arteries were hardly visible, the disc cloudy, and its outline veiled. The whole ophthalmoscopic appearance, in fact, approached that of the typical Stanungspapilla, the result of meningitis, as figured in my chromo-lithograph (Pl. v., fig. 2). Vision had become impaired; within the last few days ulceration of the outer margin of the cornea had commenced, and the pupil was sluggish. As she could not read, or keep her eye open, even for a few seconds, telling the time on a white-dialed watch was the only test for vision I could apply; this she could only do with difficulty.

Injections or electrolysis, a successful case of which has been recently reported by M. Martin, may be tried in the incipient stage of the affection; but when the dilatation is general, and deterioration of vision is progressing very rapidly, time is precious, and the urgency of the case calls for more radical measures. I therefore ordered the child, then two months old, to be weaned, with the intention of tying the common carotid artery.

Wishing to give the antiseptic treatment a trial in this case, I allowed Dr. Foulis, on Oct. 20th, to perform the operation. The patient was put under chloroform by my assistant, Mr. Bell, an incision two inches and a half in length was made along the border of the sterno-mastoid muscle, and the artery exposed and tied with catgut ligature under the spray. The ligature was cut short. The only peculiar feature of this case was that a triangular-shaped lymphatic gland of considerable size was found over the vessel, and this had to be lifted to allow the application of the ligature. The edges of the wound were brought together by wires and the antiseptic dressings applied. The spray was also used in the subsequent dressings. Pulsation in the orbit immediately ceased, the tumour was considerably diminished, and the eyeball retracted within the orbit to such an extent that motion in every direction was perfect. The ulceration of the cornea was arrested, and the conjunctival vessels retreated to the cul-de-sac. Vision is now normal (she can see the seconds' pointer on the watch), the ophthalmoscopic appearance shows clear definition of the disc, and the arteries are of nearly normal calibre. The veins are still slightly dilated and tortuous at the periphery. There has been no bad symptom during the whole course of treatment. She slept well, her appetite was good, and the temperature has never risen above 100° F. Dr. M'Leod, Professor of Surgery at the University, examined the patient on the fifteenth day after the operation, and found her in a most satisfactory condition, leaving nothing to be desired. She was then regarded as convalescent. When the stethoscope is applied to the brow a slight puffing sound is still audible, but the patient is not conscious of it, and there is no pulsation. This puffing may continue for a considerable time; indeed, a case is recorded by Corner in which it lasted for twelve years, before entirely disappearing.

FIG. 2.

Fig. 2 is from a photograph taken of the patient on Nov. 17th, four weeks after the operation, which shows that the eyeball was still protruding though slightly, but as it was gradually receding within the orbit she was dismissed cured.

I may take this opportunity of saying, apart altogether from the merits of antiseptics, that the introduction of the catgut ligature, in a form to render it safe for tying large arteries, is itself a great achievement.

I cannot close this communication without expressing my sincere grief at the sudden death of Dr. Foulis during the course of this case. Besides assisting me in this operation, he had been associated with me in experimenting on the vitreous body, and in other pathological researches, and his

devotion to science, united with his modest demeanour, rendered his co-operation a real pleasure. He has fallen a martyr to professional duty.

TETANUS FOLLOWING OVARIOTOMY; DEATH ON THE EIGHTEENTH DAY.

BY JAMES M. BENNETT, M.D., M.R.C.S.,
SURGEON TO THE LIVERPOOL SURGICAL HOME FOR THE DISEASES OF WOMEN.

ON August 10th, 1881, ovariotomy was performed on S. T——, aged forty-one years. She had suffered from a large multilocular tumour for over eight years, the larger cyst of which had been tapped three times previously. The only feature worthy of remark (prior to operation) was the exceedingly small volume of the pulse, its wave was the slightest, and the heart sounds were normal, but wanting in rhythmic force. The respiration seemed to become so feeble and infrequent during the administration of the anæsthetic that some slight delay occurred; however, all went well, and after dividing and tearing through many well-organised adhesions a large tumour was removed, the contents of which measured fifty-nine pints. The pedicle was small, and was ligatured by transfixion, cauterised, and returned. The right ovary being much diseased, and having cystic growths, well marked on its surface, was also removed, its pedicle being similarly treated. After removal to bed the temperature was 98°, and the pulse 80. From this period until the evening of the fifteenth day all went well. Bowels moved, appetite good, sleep natural and refreshing, no opiate being necessary. Attention was first called by the nurse to a slight shivering, which, she said, did not amount to what was termed rigor, and to an erythematous blush which made its appearance on the arms and legs. The patient also complained of a sore-throat, which I carefully examined, but could find nothing to account for it. On closing her mouth she said that her jaws were stiff, but laughingly asked when she might get up, and might she have whatever she pleased in the shape of food. There was no alteration in the pulse, except its small volume; the temperature was normal. Opium and quinine were ordered, a grain of each every four hours.

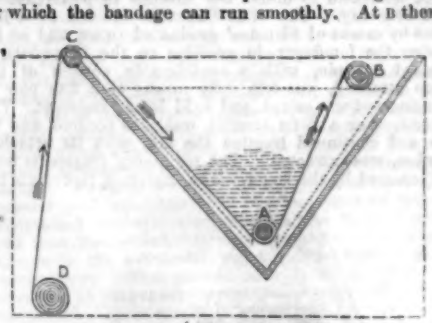
On the morning of the sixteenth day the risus sardonicus began to show itself, and the closure of the jaw to become marked; she was still able to swallow fluids, and expressed herself in the most cheerful manner. There was very slight alteration in either pulse or temperature—so much so, that my colleague expressed a doubt as to whether the symptoms might not be nervous, and that they would pass off. As she had not slept well the night previously, and also to try the effect of belladonna, the one-sixteenth of a grain of sulphate of atropine was hypodermically injected; beef-tea injections, with five grains of quinine in each, were administered every three hours. No benefit appearing after three repetitions of the atropine, the extract of physostigma in one-quarter-grain doses was substituted, the temperature at 6 P.M. being 102°, and the pulse 130 at 8 P.M. The pulse before the physostigma injection was 130; fifteen minutes after it had fallen to 118. Second injection at 12 P.M.: pulse 115 before; fifteen minutes after, 100. Third injection at 4 A.M. on the 17th: temperature unchanged; pulse 118 before, 106 after. Fourth injection at 7.30 A.M.: increased the physostigma to one-third of a grain; pulse before 112, after 100; temperature 103·2°, unchanged by the action of the drug. Fifth injection at 10.30 A.M., same quantity used; pulse 117 before, 108 after. Sixth injection at 1.30 P.M.: pulse before 130, after 120. Although the pulse was reduced the tetany was more marked after its use, the opisthotonos becoming well established. Chloroform inhalation and one quarter of a grain of morphia injection substituted; mercurial ointment, with belladonna, rubbed into the spine simply as an adjuvant. At 8 P.M. nicotine was tried in one-grain doses, according to the directions of Professor Houghton. The first dose was swallowed with difficulty. One grain was thrown into the rectum within an hour, and was retained, as was a third dose. From none was there the slightest physiological effect. At 10 P.M. the opisthotonos was so marked and the spasms so painful that the chloroform inhalation, with morphia hypodermically, had to be resumed. The temperature at 12 P.M. was 105°. The tetanus became of the most complete kind. The catheter passed with difficulty into the bladder, and the enema into the rectum. The patient was sensible to within a short time of her decease, and was hopeful to the last. She sank exhausted at 8 P.M. on the eighteenth day after the operation. There was no portion of the wound that was not thoroughly united, and there was no exciting cause to be made out for such an unexpected result to an otherwise successful case. The temperature just prior to death was 107·2°.

The physostigma in this case completely failed to exert any marked influence further than that of lowering the pulse, and the nicotine showed none of the relaxing powers assigned to it. The papers of Dr. Frazer and Professor Eben. Watson encouraged the use of the former, whilst Professor Houghton's notes led to the trial of the latter. Both preparations, I presume, were pure and well prepared, having come from the establishment of Messrs. Syme, one of our most trusted pharmacists.

A MACHINE FOR ROLLING PLASTER-OF-PARIS BANDAGES.

BY CHARLES DONKIN,
JUNIOR HOUSE-SURGEON, INFIRMARY FOR CHILDREN, LIVERPOOL.

THIS machine consists of a trough of wood, shown in the sketch. The dotted line represents one of the ends which has been removed. A and C are pieces of brass gas-tubing, over which the bandage can run smoothly. At B there is



SCALE .½INCH TO 1 INCH.

an iron spindle, square in section, so as to grip the bandage. The length of the trough is made to suit the width of the bandage most commonly required, but this can be diminished (if narrower bandages are wanted) by using a sliding end, made of wood, one inch and a half thick, which fits the trough (see the dotted triangle in the figure). D represents the plain muslin bandage passing over the tube at C, beneath the tube at A, and finally wound upon the spindle, B. As soon as the spindle has gripped the bandage, plaster is poured into the trough formed by the muslin itself, and becomes equally and sufficiently distributed throughout the meshes. Sufficient plaster should be used to reach about half way up the sides of the trough.

The machine has been in constant use by Dr. Oxley, at the Liverpool Children's Infirmary, for some months past.

HOSPITAL SUNDAY IN CUMBERLAND AND WESTMORELAND.—The twelfth annual report of collections in aid of the medical charities of Cumberland and Westmoreland has just been published, and shows that a larger aggregate sum has been distributed than in any previous year. The Cumberland Infirmary obtains £495; the Whitehaven Infirmary, £334; the Silloth Sanatorium, £217; the Carlisle Dispensary, £110; and the Fever Hospital at Carlisle, £94. The total sum obtained since the collections were first started, in 1870, is £11,611 5s. 7d. In their report the committee state their regret that Dr. Barnes, who first started this important movement in Cumberland, and who has been secretary for twelve years, has felt compelled to retire owing to press of other engagements. He is succeeded in his office by Dr. A. Macdougall, of Carlisle.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

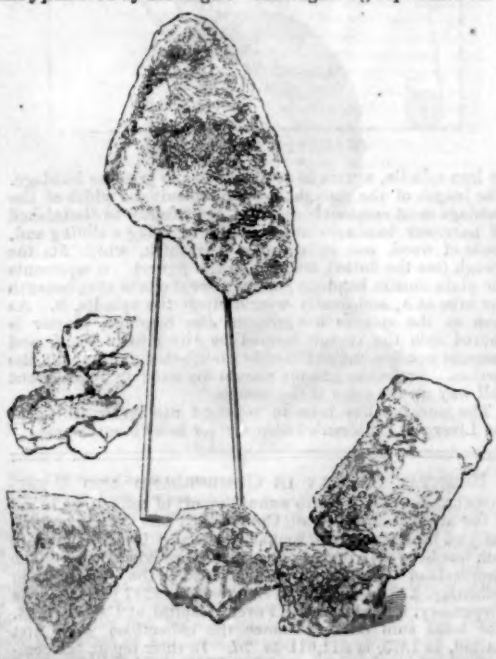
CROYDON GENERAL HOSPITAL.

HAIR-PIN IN FEMALE BLADDER WITH LARGE CALCULUS ATTACHED; REMOVAL; RECOVERY.

(Under the care of Dr. WALTER ROSSER.)

A YOUNG woman, aged eighteen, presented herself in the out-patient department, complaining of pain in the lower part of the abdomen, which she attributed to the presence of a hair-pin, said to have been swallowed eighteen months previously. Pain during micturition suggested an exploration of the bladder, and a calculus of considerable size was detected. At the time of admission the urine was alkaline, and contained pus.

On Sept. 24th the patient was put under the influence of ether, and by means of the lithotrite the anterior portion of the calculus was broken up, and some fragments and débris were removed by Clover's apparatus. On examination per vaginam several large fragments were felt, and it was thought advisable to dilate the urethra in preference to further crushing. The dilatation was effected in a few minutes by means of Siemens' graduated tubes, and on introducing the forefinger, in addition to the fragments, a large-sized hair-pin, with a considerable portion of the calculus attached, was felt. By means of a fine pair of forceps one end was seized, and held by an assistant. The other end, after a little trouble, was also secured, and by gentle and continued traction the pin, with its attached concretion, was extracted. The remaining fragments were easily removed by the finger. The engraving represents the



actual size of the hair-pin, and a few of the larger fragments. The weight of the whole calculus was close upon an ounce, and its greatest circumference was three inches and a quarter. By chemical examination it was found to consist of the mixed phosphates. The urethra recovered itself in thirty-six hours, the urine after that time being retained, and passed naturally, and the patient was dismissed in a fortnight well.

ASHBURTON AND BUCKFASTLEIGH COTTAGE HOSPITAL.

PLASTIC OPERATION FOR EXTREME CONTRACTION OF FINGER, AND TRANSPLANTATION OF SKIN-FLAP FROM SIDE OF CHEST; CURE.

(Under the care of Dr. JAMES ADAMS.)

CHARLES K——, aged fourteen, was admitted on the 29th June, 1881, with the following history:—Last January, while engaged in some work in connexion with a threshing machine, his right hand was caught in the cog-wheels of a part of the machinery. The second finger was injured at the last phalanx, causing a deformity, shown in the wood-cuts, but leaving him a useful finger. The third finger had the soft tissues in front of the first and second phalanges nearly detached *en masse*, down to the flexor tendon, which was exposed. This damaged piece of tissue, which appears to have been left hanging at one end by merely a thread of skin, was removed by the medical man who treated the case, and the wound healed slowly. There was no fracture or dislocation in any part of the finger. When Dr. Adams saw him there was the extreme contraction shown in Fig. 1, the tip of the finger being tightly bound

FIG. 1.

down to within a quarter of an inch of the palm of the hand, by a dense and unyielding cicatrix. No movement of extension or flexion was possible. The finger was perfectly useless; indeed, worse than useless, for it was in the boy's way in his work on a farm, and he was taken to the hospital by his mother to have the finger amputated. But it appeared to be a case in which a plastic operation might be fairly attempted. This was accordingly done. The chief difficulty that was anticipated was to keep the finger extended after dissecting out the cicatrix. This was overcome by a whalebone splint, to go along the back of the finger, with a leather tip to take the end of the finger, and fastened securely at the wrist by means of a strong buckle. The idea and pattern of this simple but efficient splint were taken from Mr. W. Adams's book on "Contractions of the Fingers."

On June 30th, the boy being under chloroform, the cicatrix was dissected out. It was extremely dense and deep, and at the distal phalangeal joint it extended considerably to the radial side, twisting the nail in that direction. The operation wound was a kind of irregular oblong shape comprising the front of the second phalanx and the adjoining two-thirds of the first. At one part over the first phalanx it was neces-

sary to go so deep as to expose the flexor tendon, without, however, opening the sheath. It was then possible to extend the finger nearly straight, and to keep it in that position by means of the whalebone splint. A graft was dissected an inch wide by two inches and a half long in an oblique direction across the left second and third intercostal spaces, leaving the graft attached at its upper end by a thick pedicle. This site was selected for obtaining the graft as being situated where the hand would lie comfortably when the arm was flexed on the chest, and placed as for treatment for fracture of the right clavicle. The most tedious part of the operation was to secure the graft to the finger. After turning it half way round and fitting it into the wound of the finger, which it filled well, it was fastened there by means of three harelip pins and seven or eight fine interrupted silver wire sutures. By these means the graft was well adjusted in its new situation. The finger was dressed with carbolised oil, the elbow raised by a thick firm pad, and the arm bound securely to the chest by strapping and bandages. Full doses of opium were given to procure sleep and the importance of keeping the arm absolutely quiet was impressed on the patient's mind.

On July 2nd the finger was dressed, and the harelip pins and one of the interrupted sutures, which was causing tension, were removed. The extreme end of the graft where it joined the palm was sloughy, and about a quarter of an inch

FIG. 2.

of it eventually came away. Pulse and temperature normal. Two days later three more sutures were removed; adhesion was taking place.

On the 7th, under chloroform, the neck of the graft was divided and the remaining sutures were removed. The graft was now firmly adherent, looked well, and was in a satisfactory position. The next day the whalebone splint was taken off and replaced by a common front splint, reaching from halfway up the arm, and extending beyond the fingers. It was found that the pressure of the leather tip had caused some superficial ulceration of the end of the finger.

On the 18th everything was going on well; the wound was rapidly healing. It had been dressed twice a day, the splint being removed for the purpose each time, and passive motion practised. The patient could now touch the palm of his hand with this finger, and also extend it straight.

On the 28th the finger was sound. The boy was to leave off the front splint and to wear the back whalebone splint by night for two months. This was a precautionary measure, to prevent the tendency to contraction. He was discharged about August 12 h, and on the 19th he went to work and was able to use the right hand without any inconvenience.

Fig. 2 (which was prepared from a photograph) represents the finger after the operation wound was healed. The size and position of the graft can be seen fairly well, the line of junction being very distinct on the inner side, while at the upper and lower margins the lines of junction are less plain, but more distinct than represented in the woodcut.

Remarks by Dr. ADAMS.—This operation has proved to be a complete success. The finger was so badly contracted that the choice of treatment lay between amputation and a plastic operation. I have no doubt this particular operation, in which the graft has been taken from the chest, has been done before, although I have been unable to find a similar case in THE LANCET, or in the surgical works I have been able to consult. It appears to me to be far better to obtain the graft from the chest than to get it from the thigh, as the arm can rest much easier in the former position than the latter. I found there was a good deal of irritation set up in the track of the harelip pins; and in any future case I should certainly not use steel pins on account of this. I should have stated above that the chest wound healed kindly, and was entirely cicatrised before the boy was discharged.

WESTERN DISPENSARY, EDINBURGH.

CASE OF GUMMATOUS TUMOUR OF THE PHARYNX.

(Under the care of Dr. HUNTER MACKENZIE.)

MRS. D——, aged twenty-six, applied at the dispensary on May 5th, 1881, complaining of difficulty and pain in swallowing, with occasional regurgitation of food into the nose. Her complaint dated from February—at least, it was then that the difficulty in swallowing first attracted her notice. The pain extended around the neck, and was sometimes present to a slight extent in both ears; it was present only during deglutition. There was no respiratory impediment, and phonation was normal. She was gradually losing flesh, and now could only swallow fluids. On examination, the left half of the posterior pharyngeal wall was dense and prominent; the swelling extended from the velum palati as far down as the entrance to the larynx, where it assumed a smooth, rounded, bulging appearance, obscuring the laryngeal orifice, which was deflected towards the right. The swelling pressed against the epiglottis, causing some flattening of its surface. Towards the right of the place of contact of the tumour and epiglottis was the respiratory passage of diminished calibre. On palpation the tumour felt dense and firm throughout. It could be detected as a globular fulness in the submental region; there was no glandular enlargement. The patient was three or four months advanced in pregnancy (her second child). She never had miscarried. Pulse small, 90 per minute; temperature 96·8° (4 P.M.). The interior of the larynx was normal. She was ordered ten grains of the iodide of potassium before food, with one drachm of the syrup of the iodide of iron after food, three times daily. Improvement was at once manifested; two days afterwards she felt better, was swallowing more easily, and food had ceased to regurgitate into the nose. This improvement was steadily maintained; the tumour decreased in size, and on June 13th laryngoscopic examination showed that, instead of resting against the epiglottis, an interval of about one-sixth of an inch separated them. The patient did not subsequently return to the dispensary, but in November it was ascertained that she continued free from throat trouble. In October she had been confined of a healthy child, and had had an attack of puerperal mania.

Remarks by Dr. MACKENZIE.—The nature of this case, of which a mistaken diagnosis had been arrived at previous to her applying at the dispensary, becomes clear in the light of the axiom laid down by Bäumler (Ziemssen's Cyclopædia, vol. iii., p. 202), viz:—"When tumours of the posterior walls [of the pharynx] occur in adults, we should always think of syphilis; while in children retro-pharyngeal abscesses are more apt to be due to tubercular disease of the spine." He there refers to a case where a retro-pharyngeal gummatous tumour attained a large size, and was confounded with sarcoma and carcinoma. This error occurred in the case now under notice, and it is well therefore that prominence should be given to the strong probability of tumours in this region in adults being of a specific nature. They originate in the periosteum of the vertebræ, and may give rise to necrosis, with exposure of the vertebral canal. Or they may slough superficially, and so form a large retro-pharyngeal ulcer—a not uncommon event in tertiary syphilis. Therapeutically, like a number of the other tertiary manifestations of syphilis, they are very amenable to treatment

by the iodide of potassium in large doses, with which, in anæmic subjects (as the most of such patients are), the iodide of iron may be advantageously combined. Care should be taken to administer the potassium salt before food, as, if given after meals, it is decomposed, and rendered inert by the increased secretion of acid which then occurs.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

Direct Transfusion of Blood for Hæmorrhage in Typhoid Fever.—Cases of Continued Fever with Affection of the Spleen.

THE ordinary meeting of this Society was held on Nov. 25th, J. Lister, Esq., President, in the chair. Besides the cases read by Drs. Mahomed and Whipham, a case of Chromidrosis was shown by Dr. Colcott Fox; and a committee, consisting of Drs. Cavafy, Crocker, Ewart, S. Mackenzie, and Fox, was nominated to report upon it. Mr. Lunn showed two cases of Myxœdema.

Dr. MAHOMED read notes of two cases of Direct Transfusion of Blood for Hæmorrhage in Typhoid Fever. The first case was that of an unmarried man of twenty-six years of age, who was stout, rather bloated-looking, and thoroughly out of condition; he passed through an anxious attack of enteric fever, complicated during the latter part of it by wakeful, excited delirium, resembling that of "delirium tremens," a complication not unfrequent during the defervescence of the specific fevers, and, perhaps, more especially liable to occur in persons addicted to the excessive use of alcohol. He relapsed on the twenty-fifth day of his illness; on the tenth day of his relapse, and the thirty-fifth of his fever, he had a severe hæmorrhage, which recurred twice on the following day. Exhausted, anæmic, restless, with cold extremities and a very small, thready and often irregular pulse, about 160 per minute, he was evidently fast sinking when transfusion was performed, with the immediate result of bringing down his pulse rate from 160 to 144. After this he rallied for a few days, and now gained ground so much as to give great hopes of his ultimate recovery. Six days after the operation hæmorrhage recurred to a small amount, which caused a sudden change for the worse; one or two more slight losses of blood soon reduced him to a state of exhaustion from which he could not recover. He died nine days after the operation on the nineteenth day of his relapse, and the forty-fourth of the fever. The second case was that of a married man, who had a young family dependent upon him. He was twenty-five years of age, a powerful well-made man, who during his attack of fever suffered a probably irrecoverable injury by collapse of a large part of his right lung; while, in addition to this, he had severe general bronchitis. On the twenty-sixth day of his illness he, too, had a relapse. On the fifth day of his relapse, and the thirty-first of his illness, he also suffered from a severe hæmorrhage; four days later he had three more severe hæmorrhages, and lapsed into a state of complete exhaustion and impending dissolution. On the following day, when he appeared to be *in extremis*, transfusion was performed with the best possible effects. For two days he rallied greatly, when, during the recent exceptionally cold weather, his bronchitis increased, and he died from the lung complication on the fifth day after the operation, on the fifteenth of the relapse, and the fortieth of his fever. Dr. Mahomed gave some statistics, showing that the average frequency of hæmorrhage in enteric fever was about 7 per cent. of all cases, and that about 50 per cent. of these were fatal, more than half of the fatal cases of hæmorrhage lost their lives as a direct result of the bleeding, and that it was in these cases more especially that the operation might be called for. He estimated that it might prove of service in about twenty-one out of 1400 cases of enteric fever. Each case must be judged on its own merits, and he would advise its performance whenever the patient was sinking into a dangerous condition as a direct result of the loss of blood. He claimed that by means of it fatal exhaustion and syncope might be warded off and time given for the action of remedies, a ready stimulant and food supplied to the heart and tissues, and danger of destructive ulceration of the intestines during exhaustion and anæmia be diminished. He advocated early direct transfusion of human blood by means of an Aveling's transfuser, with a small expansion and no valves. He referred to Professor Schäfer's report to the Obstetrical Society in 1879, as proving the uselessness of the blood of the lower animals, or saline solutions, for this purpose.—Mr. CRIPPS, who had performed the transfusion in the first case, said there was increased difficulty in collecting reliable statistics about transfusion, because of the variety of the cases and of the fluids transfused. Speaking only of direct blood-transfusion, he thought that defibrinated blood should not be used. Another difficulty lay in the choice of instruments; but of late years three have been especially selected—viz., (1) Roussel's, (2) the simple tube and cannula, and (3) Aveling's apparatus. Mr. Cripps thought Roussel's procedure very unsurgical, as it ignored variations in veins and such anomalies as a superficial brachial artery; it was an attempt to substitute a machine for the surgeon's hands. The simple tube requires the assistance of gravity to cause the blood to flow from one vein to the other, and one cannot judge of the amount transmitted or of the rate of flow. Aveling's instrument should only contain two drachms of blood, and Mr. Cripps had substituted bulldog forceps for stopcocks to the tubes. The vein of the recipient is first exposed, as that is much more difficult than the exposure of that of the donor. It is very important to expose it for one inch, and then to expose that of the donor. Then pinching up the vein with fine forceps, it is transfixed, and at the same time a finger is kept on the vein below to prevent blood welling into the slit. The cannula is then inserted, taking care that it does not catch on the valves. By attention to these details the operation was not difficult.—Mr. BARKER asked for experience as to Roussel's apparatus. Last summer Dr. Barlow asked him to transfuse a case of pernicious anæmia. He employed Roussel's apparatus, and found no difficulty in reaching the veins; but then difficulties arose: at first the suction-power of the instrument seemed too great, a little leakage occurred, and the blood coagulated. He therefore abandoned the instrument, and injected defibrinated blood. Not much benefit was derived.—Dr. COUPLAND asked whether the recommendation of Professor Schäfer to employ arterial transfusion in preference to venous was practically more safe and effective. By such a plan the aid of gravity is not required, the blood being pumped into the patient's vessel by the force of the donor's heart; the quantity injected might be approximately calculated from the known velocity of the arterial current; and besides the possible advantage derived from arterial rather than venous blood, the donor would not be subjected to the risk of phlebitis; and the severed artery could be secured.—Mr. PARKER was present when M. Roussel performed transfusion on a case of Mr. Adams' of amputation at the hip. So far as the apparatus itself was concerned, it was perfect in its action.—Mr. HAWARD said that as transfusion had to be done on an emergency, it was desirable to know how to do it; and therefore the simpler the apparatus the better. He saw M. Roussel use his instrument by taking blood from an arm and passing it into a basin. It is said the blood is less likely to coagulate with this instrument; but is this so? for its valves favoured this. In a case of Dr. Cavafy's of pernicious anæmia, in which Mr. Haward used this instrument, there was no difficulty at first, the blood was easily drawn; but when about four ounces had passed the flow ceased; and therefore the operation had to be stopped. The operation was of only temporary relief, and no material gain, but it seemed to do no harm. The difficulty was found to be due to a coagulum at a join of the instrument, and he found the interior of the india-rubber syringe to be roughened. He did not think the introduction of valves an improvement. There was no doubt at all that the chief point is to hold the vein up before introducing the cannula. On another occasion he saw defibrinated blood injected by a syringe by Mr. T. Smith; the child survived sufficiently to sit up and talk.—Mr. PARKER asked Mr. Haward if it was one of Roussel's own instruments or one made in this country. Roussel insisted on pure rubber being used in its manufacture.—Mr. HAWARD, in reply, said it was one of Roussel's own instruments.—The PRESIDENT agreed with Mr. Haward that the more simple the apparatus the better, and was inclined to think the use of a glass syringe enough. He exposes the vein in the patient and holds it open, and then lets blood into a vessel to about the extent of a syringeful, then draws up some blood, and expelling all air inserts the nozzle and introduces the blood into the patient's vein. The process is repeated as often as

one pleases, and it is by far the simplest, for the syringe can be obtained at any chemist's shop; it never gets out of order, and one avoids india-rubber apparatus, which always deteriorates on keeping. Our fathers would have smiled at any idea of danger from a phlebotomy; and we may be quite certain nowadays to be free of any such danger in the means we possess for purifying the skin. Mr. Lister added that he showed many years ago that the cause of the coagulation of blood is not exposure to the air, but the result of contact of ordinary solid matter with the blood for an exceedingly short time. In this process of transfusion the blood has gained this tendency to coagulate, and yet it is remains fluid in the economy as if its reception undid the effect of its contact with the solid matter. — Dr. MAHOMED, in reply, thought much less than ten ounces would suffice. In the second case only four ounces were used, and produced more visible results than in the first. The operation of inserting a tube into a vein differs in point of risk from simple phlebotomy. In his second case the operation was done under antiseptic precautions, which broke down owing to the difficulty in getting the cannula inserted. It is an operation which physicians must perform on emergencies, and they desired to know how it might be most simply done. The incision in the vein should not be a longitudinal one. Professor Schäfer lays great stress on arterial blood as being more likely to stimulate the heart, but it has to go through the lungs before it can enter the coronary arteries. — Mr. CRIPPS said that no valves occurred in the apparatus he had modified on Dr. Aveling's instrument.

Dr. WHIPHAM read notes of Three Cases of Continued Fever, with Affection of the Spleen, in two of which a high temperature occurred before death, and one of which clinically resembled enteric fever. They had come under his observation during the past three years.—Case 1: A domestic servant, aged twenty, had enjoyed excellent health, and save that she was an inordinate meat eater was guilty of no excesses. Five weeks before admission she was attacked by headache; vomiting and profuse sweats set in about nine days before the case came under observation. At this time she complained of abdominal tenderness, while under treatment the symptoms were but little altered, and on the thirtieth day she was suddenly attacked with severe pain in the left iliac region. So severe was this pain that she never ceased screaming until her death in the evening. At the autopsy a few yellowish-white masses of irregular shape were found in the spleen, giving the general impression of infarcts; no other organ showed any appreciable change from the normal condition.—Case 2: A domestic servant, aged twenty-one, had been remarkably free from illness, and had never been seriously ill save when she had chicken-pox as a child. She was in perfect health four days before admission, when she took a warm bath, after which the catamenia appeared, but ceased in about three hours, and she was then attacked by abdominal pain, chiefly in the hypogastrium, and also in the legs and back. She had lost two brothers and sisters from phthisis. After four days' rest in hospital she was so much better that she was allowed to get up, but eleven days later she was unable to stand, and had fits of alternate laughing and crying; was constipated, and complained of pains in the top of her head. On July 1st, 1878 (eighteen days after admission), her pulse was 104, but her temperature remained normal. Two days later the pulse was 72 and the temperature still normal, but she was delirious, and so noisy that she was removed to the separation ward. She became gradually worse, and died on July 11th, the temperature having risen to 109° F. shortly before her death. At the autopsy a few circumscribed dark red patches were found in the spleen, which contrasted strongly with the general brick-red colour of the organ. Beyond some congestion of the lungs no other morbid change was found.—Case 3: A domestic servant, aged twenty-six, was attacked, about Nov. 10th, 1880, with many of the symptoms of enteric fever, and was admitted on Nov. 24th. Next day several rose-coloured spots were found on the abdomen, indistinguishable from typhoid spots. Diarrhœa persisted; the patient became very weak, and then delirious; the abdomen was tympanitic. On Dec. 1st the diarrhœa was profuse; pulse 168; she died in the afternoon. About ten minutes before death the temperature rose to 108·6° F. At the autopsy the spleen weighed 16 oz.; in its substance was a large infarct partially broken down; the tissue of the organ was diffluent. The solitary glands of the intestine were unusually conspicuous, but no other abnormality was found. The cause of the disease is in each case obscure. Two explanations suggest themselves—viz., blood-poisoning, or local inflammation of, or in the neighbourhood of, the spleen, the weight of evidence pointing rather to the latter. The absence of any history pointing to splenic affection is remarkable, as also is the fact that these three patients were all female domestic servants, and of about the same age. The high temperature which was observed in Cases 2 and 3 is noteworthy.—Dr. C. T. WILLIAMS asked if the brain or spinal cord were examined.—The PRESIDENT said, that from what we know of investigation on the lower animals there are several varieties of disease, not only anthrax, but septicæmia. Perhaps in cases of obscurity it would be desirable to examine the blood before death, spreading out a thin layer on a glass slide, drying it, and staining by Koch's method. This will come to be reckoned as one of the essential methods of investigation in these obscure cases.—Dr. WHIPHAM, in reply, said the brain and cord were examined, and were not abnormal. The blood was not examined. In two the spleen was firm.

MEDICAL SOCIETY OF LONDON.

Congenital Luxation of both Knees, with Double Club-foot.—Pityriasis Rubra and its Allies.

AT the meeting on the 21st ult., Dr. Broadbent in the chair, a resolution was passed congratulating Professor Virchow, and another of sympathy with Professor Ferrier (see p. 925).

Mr. H. F. BAKER showed a case of Congenital Luxation of both Knees, with Double Club-foot. The case was that of a female infant, aged six months, who was brought to the out-patient department of the Royal Orthopædic Hospital in June. Her family history is interesting, as her father, aunt, and two uncles were born with talipes. The case was one of partial dislocation of both knees. On both sides the leg was bent towards the front of the thigh, and the extensors of the knee were so tense and shortened that there was difficulty in straightening the legs, and it was impossible to flex them. The patella was present on both sides, although there was some difficulty in finding it owing to the superabundance of skin in front of the joint. As well as this unusual deformity of the knees, there was also in this case double congenital talipes equino-varus of a more than commonly severe nature. It was a case of breech presentation.—Mr. NOBLE SMITH stated that after careful examination he regarded the case as one of arrest of development of the head of the tibia, rather than of dislocation. He would not recommend active treatment in these early days; later on an apparatus might be arranged, with a stop-joint, which should prevent forward movement of the head of the tibia.

Dr. STEPHEN MACKENZIE then read a paper on Pityriasis Rubra and its Allies. He remarked that pityriasis rubra was one of the rarer, and certainly one of the most intractable, skin diseases. He thought a series of cases of this disease would prove of value, as details of comparatively few cases are published.—Case 1: A governess, aged fifty-four, in whom the disease began at nine years, and declined to the age of eighteen, and almost completely disappeared between eighteen and thirty, but has persisted since the latter age. No part of the surface was free from redness and flaky scales. The hair was scanty, short, and thin, and the nails thickened, discoloured, and cracked. Remained under treatment a fortnight.—Case 2: A farrier, aged forty-two (drawing exhibited), in whom the disease began at the age of forty-one. There was universal hyperæmia, with large flaky scales. The nails of the fingers and toes were rough, thickened, and discoloured, and, later, cast off. After seven months' treatment with arsenic and glycerole of lead locally the disease was cured.—Case 3: A dressmaker, aged forty-seven. (Patient and drawing exhibited.) Two years before coming under observation the disease began coincidently with the cessation of the menses with numbness of the fingers; this was followed by burning and stiffness, redness, and scaliness of the fingers. After lasting in this state two years the area extended and the hands, arms, legs, and feet became attacked. The disease in this case especially affected the arms, forearms, and hands, legs, and feet, which were very red and covered with scales. A slighter degree of the same condition involved the scalp, part of the face, neck, shoulders, buttocks, and thighs.

The burning in the affected parts was most acute. The nails were roughened. This patient was under treatment for two periods of five and nineteen months, and left only a little benefited. During this time she had severe neuralgia in the head and extremities, and herpetic eruption in the course of the sacral and cutaneous nerves.—Case 4: A dressmaker, aged thirty-nine, had previously suffered from psoriasis. The present illness seemed to connect the latter with pityriasis rubra. There was hyperæmia and desquamation of the whole surface of the body, with the exception of some parts of the face and between the scapulæ. The scales were branny, but on the extensor surfaces, especially about the knees, the scales were thicker and heaped up. The nails were all dry, cracked, and discoloured, and the hair came out. There was much burning of the skin everywhere. After three months' treatment the patient left, free from all roughness and scaliness. A case was also attended to in which a patient with running eczema of the face and legs had a pityriasis-rubra-like condition of the back. After drawing attention to the characteristics of the disease, the chief being hyperæmia and desquamation of almost universal distribution, and showing (from Devergie's description, cases by Sparks and Duhring, and Case 3 of the series) that thickening and infiltration, stated by most authorities to be absent, does in some cases occur, its course and treatment were briefly discussed. Its alliances were then discussed, and it was pointed out that its resemblance and affinities were with psoriasis and eczema, especially the former, from which it differed chiefly in the eruption being more diffused but less intense, in occurring later in life, and yielding less to arsenic. The author agreed with Tilbury Fox and Hutchinson in regarding the disease as a neurosis. Case 3 of the series was instanced as particularly supporting this view:—the linear extension of the disease (probably in the course of nerves), numbness, and pallor of the fingers preceding the eruption some months, and from the patient having severe neuralgic pains in the head and limbs, and numbness in the latter.—Dr. BROADBENT had known two cases in which the disease had been mistaken for scarlet fever, high temperature and albumen occurring in each case.—Dr. R. CROCKER remarked on the transitional forms of the affection, some cases beginning as simple eczema. He mentioned some cases under his care, and remarked on the tendency to marasmus and death. He had found the urea excretion to be small, but this might be explained by confinement in bed, &c. He could not associate any neurotic condition.—Dr. B. W. RICHARDSON had seen but two instances; in one the eruption came on after great physical or mental exhaustion. In spite of its symmetry he did not think it was neurotic; his patient suffered much from the cold.—Dr. MACKENZIE, in reply, adhered to the neurotic hypothesis; in answer to Dr. Crisp he said the blood had not been examined.

EPIDEMIOLOGICAL SOCIETY.

THE first meeting of the session was held at University College, Gower-street, on Nov. 2nd, when the newly elected President, Dr. BUCHANAN, delivered the inaugural address, on Aids to Epidemiological Knowledge, of which the following is an abstract:—

Our Society enters to-day on the thirty-first year of its life. It has experienced its ordinary share of difficulties and its full measure of success. In no small degree its difficulties have been the creators of its success. That greater concern is now felt about scarlatina, typhus, small-pox, &c., than at the time of the Society's creation, and that public bodies and their officers compete with us in their interest for the problems which we study, is a result to which our Society has contributed in a foremost degree, but we still continue to hold our place as pioneers. We have among us people who study the subject from different standpoints—at the bedside, in the post-mortem room, or in the camp, the ship, &c.; but, to be successful, we need to study the δημος under other aspects than the technically medical—to study other δημοι than our own, and to identify ourselves with statesmen, geographers, and travellers — to obtain help from chemistry and physics, from meteorology, botany, and zoology; indeed it would be difficult to name a department of human knowledge to which we do not hope some day to become indebted. The first idea is the place we shall gratefully assign to mathematics. So identified is epidemiology with mathematics that there has occasionally been a confusion in the popular mind, and the study of epidemics has been regarded as essentially an affair of statistics. Epidemic disease claims the aid of numbers; but it would be a serious error to think of this relation ending with a record of quantity of disease, of death-rate, sickness-rate, &c. It is by arithmetical analysis of coincident circumstances of one and another sort that a clue is often got about the relation of effect to cause, as to efficiency of cause to produce effect. The case of relation between cholera and elevation of soil is an example familiar to us of an experience noted by the arithmetician to have something in it for the physician to inquire about. Of another sort of arithmetical help an evidence was afforded to me in the investigation of a fever outbreak, when of two competing sets of circumstances either of which might contain the cause of the outbreak. I was told the probabilities in favour of the one set were as 375 to 1, while the probabilities in favour of the other set (putting aside any probabilities against it) were but as 6 to 1. As another illustration: An investigation is being made as to the possible influence of an infectious centre upon its neighbourhood. Putting aside influences that may destroy it, there is necessarily more of it at a spot near the centre than there is at a spot further off—that is, so long as the distribution is effected after the fashion of a something radiating from centre to circumference. The question arises, How much more infection will there be at a given nearer point than at a given more distant point? Because an answer to this question is wanted before we can go on to consider the meaning of the facts we observe. In reply to this question we shall see that the distribution of an infection will be effected according as it is effected along a single plane or into space of three dimensions. In the former case the relative amounts of infection present in two given places will be inversely as the distance of each place from the centre. In the latter they will be inversely as the squares of the distances. Now, there is reason for thinking the contagious matter is subject to the laws of gravitation, wherefore it is to the plane of the earth's surface that the contagion will tend, and its distribution in that plane will come to be effected according to the law that governs radiation in one plane. In this way we can appreciate the rate at which the spread of infection should manifest itself, and we can understand the significance of the actually observed distribution. The best example of our indebtedness to physical science may be taken from the lessons that the physicist has taught us of the characters of infection itself. At the foundation of our Society there was but a half-formed recognition of the fact that every disease of the class with which we concern ourselves has a material of its own. The earlier addresses of our first President contain many exhortations to the use of the microscope as a means of understanding the nature of diseases which we had to study; and from the microscope in the hands of Dr. Beale we soon came to know of the existence of particulate matter as infective liquids, but it was not until the resources of the physicist had been applied to separate out the particle from the fluid that any conclusion could be formed about the inherence of the quality of contagiousness in the one or the other element of the infectious liquid. The method of diffusion was used by Chauveau to such liquids, and first to vaccine lymph; the soluble was separated from the particulate, and the potency of the lymph was found to be in the particulate only. It was soon found that other contagia, like small-pox, exhibit the same quality. At this time the pathologist had been cautiously tracking other lines of research, and so long ago as 1841 a happy inspiration had led Dr. Farr to insist upon the use of the word "zymotic" as best expressing the character common to epidemic, endemic, and contagious diseases, and then in 1848-9 Dr. John Snow had satisfied himself that the best explanation of the phenomena of cholera and its spread was to be found in the existence of a specific cholera "cell" capable of passing into other bodies and producing cholera in them. Further, Dr. Budd reached the judgment alike for diseases propagated through air and for those communicated by water, that "the contagious agent which issues in the excreta is the fruit of its own prior reproduction within the already infected body." For years before the researches of Pasteur in 1865 into the silkworm disease the suggestion that particulate contagium must, almost of necessity, be contagium vivum, had been one that had its attractions for the botanist.

What if it should be the reproductive matter of some vegetable thing? At one time it did seem that we should find the genesis of cholera in that direction. It is to be admitted that Dr. Sanderson's critical examination of Professor Hallier's experiments relegated to the domain of the unproved this promising vision, but we are coming more and more to expect that the materials of some contagia have another habitat, perhaps in a known but not yet recognised alternative form. Unquestionably the prospects held out to the epidemiologist are of the most fascinating kind. As there was a period when we were promised in the behaviour of metallic oxides in the presence of peroxide of hydrogen the line of explanation of what constituted contagiousness, so now we seem to have reached a point where the botanist offers us the most promising insight into the nature of what is epidemic. I wish to show the line that remains to me by pointing out some of the interesting and important consequences that follow from the doctrine which would regard the material of infectious disease as something in its essence having a place and mode of life beyond the infected body. One of these is the possibility that is appearing of being able to cultivate that material outside the body in ways that shall give it different degrees of potency. So long ago as 1867 Dr. Sanderson had distinguished two sets of consequences producible by local inflammations artificially set up in the lower animals. The one a chronic disease having the characters of tubercle, the other an acute disease presenting the features of pyæmia, and both infective, and being producible at the will of the experimenter by the inoculation of the same material. In 1872 he demonstrated in a number of acute infective processes, microzymes abounding in the exudation liquids and in the blood; he had shown how by successive transmissions of infective material an intensely virulent material could be obtained, the original product and the cultivated material having certain microscopical and physical characters distinguishing the one from the other. Dr. Koch of Walstein made a notable advance, and found the bacilli of splenic fever grow and multiply in blood serum or aqueous humour, and even in artificially prepared cultivating liquids, and that this could be done through successive generations. More than this, he found that mice inoculated with matter that contained numerous spores died of splenic fever in twenty-four hours, whereas mice inoculated with liquid in which spores were scarce did not die until later. And shortly afterwards our own Dr. Klein found this same property of cultivability outside the body in the very similar bacilli of the disease of the pig known as pneumo-enteritis, and liquid of the eighth generation inoculated in a pig produced a disease reduced in intensity. In 1879 Dr. Sanderson found that the cultivation of anthrax in the body of rodents modified the poison, so that the subsequent inoculation of a bovine animal did not destroy the life of the latter, but protected it from subsequent attacks of disease. At the same time M. Pasteur made out for the disease called fowl cholera the same quality of cultivability by multiplication of its bacilli in inorganic, but not vitalised, liquids. We cannot help having before us the dazzling prospect of being able to offer to men and animals the protection of a trivial disease against each more fatal disease, to achieve what M. Pasteur calls the vaccination of animals against the several contagia. But perhaps as valuable are the indications we are gaining of possible means of preventing epidemic disease in other ways. Suggestions arise of material of contagion having, like tapeworms, an alternative mode of life outside the animal body, or in one animal body leading a different sort of existence from that in another animal body. What if the material of cholera, or of yellow fever, or of enteric fever, should have another habitat than as a contagium, and there exist, having no power of producing disease until its conditions were changed, but then altering its mode of life, and becoming the active material of disease in animals into whose bodies it was introduced? What if we could recognise it in its other fashion of life, and destroy it, or prevent the conditions necessary for its development? In 1875 Dr. Klein recognised in a particle peculiar to enteric fever a microphyte which had been identified by Professor Cohn of Breslau, as occurring in the water of a well at Breslau, and the district of the city supplied by that well had long been notorious for the amount of enteric fever in it. The relation between milk and outbreaks of enteric, or scarlet fever, or diphtheria, has been thought of as a mere affair of disease entering milk-cans by the aid of water used in washing, or of hands used in milking cows. It may turn out the disease-producing milk has received some organism that under other conditions of life would have been impotent, or such organism may have been derived from the body of the cow herself. Indeed, the hygienist is coming to suspect that he may often have to do with organised material not far developed from perfectly non-specific germs. It is impossible not to recollect the inquiries of Dr. Ballard at Welbeck and Nottingham, in which he heard of strange maladies occurring in groups of people, and having their cause in some common article of food. Such are a few examples of the aid which pathology is rendering to an understanding of epidemics.

Dr. Buchanan's address was followed by a paper on "The Progress of Zymotic Micro-pathology," by Dr. G. C. HENDERSON. After alluding to the great importance which the question of the relation of micro-organisms to disease had recently assumed, the speaker enumerated the various affections in which their occurrence had been noticed. He then gave a brief summary of the researches of Pollender, Brauell, Davaine, Klebs, Sanderson, Cohn, Koch, Greenfield, Pasteur, and Toussaint in anthrax or splenic fever, showing how gradually our knowledge of the life-history of the bacillus anthracis was obtained. Special reference was made to the "protective inoculation" of modified virus as recommended by Pasteur and Toussaint in France, and by Sanderson and Greenfield in this country, as well as the criticisms on the method recently published by Koch. The process adopted by the latter for "pure cultivation," to prevent the unchecked mixture of the original bacillus, micrococcus, &c., stock with accidentally introduced aerial germs, was to grow them on media rendered semi-solid by gelantine, instead of in liquids. Gaffkay's experiments on the cultivation of aspergillus and other "moulds" by this method were referred to as tending to show that Grawitz's results on the development of "moulds," ordinarily harmless, into toxic products were due to contamination of the fluids used. In septicæmia the researches of Billroth, Klebs, Rindfleisch, Lister, and others were noticed, as well as the recent observations of Semmer and Krajewski on the protective inoculation of a modified virus in that group of affections. Bacilli, bacteria, and micrococci were also mentioned as the supposed causes of erysipelas, diphtheria, variola, vaccinia, enteric fever, malarial fevers, leprosy, scarlatina, and several other complaints; while the researches of Obermeier, Carter, Heydenreich, and others on the occurrence and the connexion between relapsing fever and the spirillum in the blood were alluded to. In conclusion, the author expressed his opinion that the reasons for admitting the micro-organisms to be the causes of the diseases in anthrax, pneumo-enteritis, fowl cholera, and some forms of septicæmia, were as strong as those for holding the trichina spiralis to be the cause of trichinosis. In the other affections, when the malady was communicable by inoculation from one person or animal to another, and the same organism was present in the blood or tissues of both, he was, while inclined to admit the organisms as causes of disease, obliged to look upon the case as not absolutely settled till cultivation and inoculation experiments had been made. The author felt obliged to refrain from a full acceptance of Pasteur's result till the question of the non-recurrence of anthrax after one attack was definitely proved. In the discussion which followed, Sir Joseph Fayrer, Sir William Smart, Dr. Cobbold, Dr. Vandyke Carter, and others took part.

CAMBRIDGE MEDICAL SOCIETY.

THE first meeting of the Society, since the summer recess, was held on Friday, October 7th, at 2.30 P.M., Professor Paget, M.D., F.R.S., President, in the chair. A letter was read by the President, from Dr. Creighton, announcing his resignation of the office of Secretary, owing to his leaving Cambridge. A resolution was passed unanimously, thanking Dr. Creighton for his past services to the Society, both as secretary and treasurer, and the President undertook to convey to Dr. Creighton the expression of the feeling of those present. Dr. Bacon and Mr. Shann were appointed as joint hon. secretaries, the former accepting also the functions of treasurer.

Dr. ANNINGSON read a paper on the Etiology of Zymotic Diarrhœa. He showed, from his experience as medical

officer of health in Cambridge, that infant mortality was excessive in 1880 and due to epidemic summer diarrhœa. In order to show what, if any, definite relation there might be between the numbers of cases of sickness and of deaths on the one hand, and meteorological conditions on the other, Dr. Anningson exhibited a chart, showing the variations from day to day in the rainfall, atmospheric pressure, temperature and humidity, and the cases of sickness and deaths for each week from July 17th to October 9th. By this chart the sickness and mortality appear to have had two marked periods of exacerbation, the first in the second week of August after a steady rise from July 18th to August 14th, the second period reaching its height more rapidly in the second week of September, and declining sooner. The meteorological conditions preceding directly or accompanying the highest readings of sickness and death were a high temperature, maximum above 70° F., and minimum above 60° F.; a low degree of humidity; and a gradually diminishing atmospheric pressure, followed after the occurrence of the first cases of illness by a heavy fall of rain. That any one of the above conditions, though some of them are in a measure interdependent, is not alone a determining factor in the causation of epidemic summer diarrhœa is shown by the fact that while the temperature curves in the week ending August 14th were higher even than those of the week immediately preceding it, yet the epidemic continued to decline. There is this difference, that the heat was concurrent in the one week with a rising in the other with a falling barometer.—Dr. PAGET remarked that in Scotland the mortality was not greater during the hot months, but rather less than the average, and alluded to a thesis read by Dr. Buck of Leicester, who contended that heat was not the sole cause of summer diarrhœa, but that the imperfect drainage of ground and sewage water were important factors. He added that at Melbourne, in Australia, it was found that the greater the amount of summer diarrhœa the more typhoid was there in the autumn, suggesting that similar organisms might be the cause of both.—Mr. HODSON said that while summer diarrhœa had formerly been prevalent regularly in Bishop's Stortford, since an effective system of drainage had been in operation in that town this disease had been very uncommon and typhoid fever had also been much less frequent.—Dr. LATHAM observed that Dr. Anningson's tables showed that the highest rate of sickness was preceded by a fall of the barometer and a rise of temperature, and that when the barometer was high and the temperature also, then the mortality was low. He considered that the high temperature had the effect of promoting putrefactive changes, and the low atmospheric pressure had the effect of favouring the introduction of sewer gas into houses. Great variations, too, of temperature had the effect of lowering vitality and rendering individuals more liable to zymotic influences.

Mr. WHERRY exhibited some bones of the Saxon period showing the same pathological changes as are now recognised under the name of Arthritis deformans. These bones were found at Girton College, near Cambridge, only a few feet below the surface, at which spot some sixty skeletons have been already unearthed, together with beads, fibulæ, and cinerary urns, containing burnt human bones, as well as specimens of Roman glass, Samian pottery, &c. The date ascribed to these bones was about A.D. 410. A large femur was shown with its articular end invaded with the porcellaneous condition produced by friction after absorption of the cartilages, while there were a number of mushroom-like exostoses round the margin of the joint. Almost all the large joints were affected in this skeleton. Mr. Wherry mentioned that traces of this disease had been found in the ruins of Pompeii, and that Lebert had found bones similarly affected in the catacombs of Paris and that Virchow had recognised the disease in some vertebræ dug up in Pomerania. Mr. Wherry then showed some jaw bones of other Saxon skeletons, in which the teeth were curiously ground down.—Dr. HUMPHRY considered the specimens of great interest and worthy a place in the Museum, and compared them with some anchylosed vertebræ in Dr. Thurman's collection, found in the long barrows in Wilts, and said to be remains of Pre-celtic man.—Dr. BRADBURY suggested gout as a possible cause, and Dr. LATHAM alluded to Charcot's theory of disease of the spinal cord as a cause of the change.—Mr. WHERRY, in reply, regretted that the distance of 1000 years precluded the chance of verifying M. Charcot's theory, but thought that if the disease were of nervous origin it would be more symmetrical and affect the smaller joints.

Dr. BRADBURY related a case of Dilatation of the Stomach treated by washing out with a syphon tube, and showed the patient, a man about fifty-eight, who had been treated by him in the hospital since June last. The patient had for four years preceding his admission been subject to attacks of vomiting, recurring at intervals of seven or eight weeks, and lasting, as a rule, two or three days. For a month before admission he had vomited almost daily. Gradual loss of flesh had been observed from the first, and since a month previously emaciation had been rapid. Vomiting occurred from one to two hours after a meal, the vomit not being very copious, and seldom amounting to more than a pint. From his appearance it was evident that the patient had wasted very considerably, but his complexion was florid, his skin elastic, and there was no history of malignant disease in the family. The teeth were extremely bad. No tumour could be detected in the abdomen, but the area of stomach resonance was increased, extending somewhat below the margin of the ribs, and being traceable as far as the mid-line of the body. Two days after admission he vomited some yeasty matter which, on microscopic examination, was found to contain numerous sarcinæ. He again vomited on the two following days, and continued to do so at intervals of about a week until the 28th of July. The treatment up to this time consisted merely in careful dieting and in the administration of a mixture containing strychnine and hydrochloric acid with his meals. From this date, however, the stomach was washed out with the syphon tube at intervals of a week to ten days, and at the end of a month his appearance had improved greatly. He had gained a stone in weight; nausea being unfrequent and vomiting entirely absent. Though still under treatment the "washing out" was only required at much longer intervals than at first, and during the intervals he was entirely free from discomfort. Simple warm water was used, the stomach holding about two pints, without any uneasiness arising. When this quantity was introduced the stomach was emptied by the syphon action of the tube and the process was repeated until the water returned clear.

Reviews and Notices of Books.

The Floating Matter of the Air in Relation to Putrefaction and Infection. By JOHN TYNDALL, F.R.S. London: Longmans. 1881.

THE scientific world has long since learnt to receive Professor Tyndall's views and opinions with interest and respect, and we feel assured few members of our profession who read this his latest volume will be disposed, as some he suggests have done, to reproach him "with having quitted his own *métier* in speaking of these things." *Ars longa, vita brevis est*, may be equally well applied to science, and urged as a reason for its subdivision into departments, and we know of no better example that could be given of their mutual relation and interdependence to each other and the whole than is afforded by these researches of Professor Tyndall. Occupied in investigations of light and its influences, it became evident that a beam of light passing through a dark room manifested itself by the brightness with which it illuminated the floating matter in the air. It was necessary for his purpose to have the air or vessels containing it "optically empty"—in fact, to get rid of these floating particles. Passing the air through marble wetted with strong caustic potash, through fragments of glass moistened with concentrated sulphuric acid, as well as a variety of ethers and alcohol, were found to be ineffectual; but on passing it through the flame of a lamp or through a platinum tube heated to bright redness, the floating matter was sensibly destroyed. "It was therefore combustible—in other words, *organic* matter."

Two pregnant facts were here manifested. First, that the air is loaded with organic particles, which may be destroyed by passing through a flame, or, as experiment showed, kept back by a close plug of cotton-wool; in connexion with which must be remembered the experiments of Schrœder and Pasteur, who had demonstrated the inability

of air filtered through cotton-wool to convey microscopic life. Second, that organic particles may be passed through chemical media, supposed to be absolutely destructive, without decomposition. How was it possible for one versed and interested in the facts and questions of natural philosophy not to be impressed with the important bearing these facts probably might have on two of the burning questions of the day? Might not these organic particles be spores, seeds, ova, germs in fact, with which the air can thus be shown to be loaded, and which, in accordance with the germ theory, give rise to fermentation, putrefaction, and infection? Would not their universal presence also render the supposition of spontaneous generation unnecessary, and the indestructibility of the particles themselves by chemical means, so often employed and depended upon, render valueless many of the test experiments employed to prove its truth?

The first of the five essays of which the book before us consists is, so to say, introductory, treating of experiments on dusty air, the history and gradual development of the germ theory, Pasteur's researches on parasitic diseases of silkworms, and septic surgery; the remaining four being devoted to working out the problems indicated. In the second essay, for instance, are recorded the details of experiments in relation to putrefaction and infection, which resulted in the establishment "of the induction that the power of developing 'bacterial' life by atmospheric air, and its power of scattering light, go hand in hand." In other words, that air which contains organic particles which scatter the crossing beam of light contains elements that develop bacterial life, whilst air in which the crossing beam of light fails to show the presence of these particles is incapable of developing bacterial life; the term bacterial life being used apparently as involving all forms of putrefactive and fermentative change, due to the development of living organisms.

The third essay is more especially a relation of experiments undertaken to show the vitality of microscopic organisms, and the bearing of the foregoing facts upon the theory of spontaneous generation, with a result that though the tests were very numerous and very varied, in no instance when the precautions were carried out securely in the experimental proceedings, and only air divested of its floating particles was admitted to the sterilised infusions, was there any evidence of bacteria and allied organisms, even after long periods of time; but as soon as these were exposed to the common air putrefaction with the presence of living organisms at once manifested themselves.

In the fourth essay the author is more discursive, passing from the investigation of fermentation to spontaneous generation, putrefaction, "Listerism," vivisection, splenic fever, and preventable medicine. Whilst the last essay is devoted to spontaneous generation, considered in a *pro* and *con.* argumentative form, exhaustively, because "it is desirable that this uncertainty should be removed from all minds, and doubly desirable on practical grounds that it should be removed from the minds of medical men."

It will be obvious, from the notion thus given of the plan and scope of the book, that it is not to be regarded as a systematic treatise, nor does it pretend to offer new discoveries or to suggest new theories; but rather by the stern logic of experiment to show what of modern philosophy in the matter of germs and germ life is demonstrable—what is fairly reasonable deduction and what is valueless, because the ground of assertion is proved to be untenable. Nevertheless, even in its discursive form, it is of extreme value. In the discussion of such matter the training of one like Professor Tyndall, whose life has been devoted to unravelling the mysteries of sound, light, electricity, heat, &c.—requiring the greatest care and exactitude in experiment, and the most close and cogent reasoning in arriving at conclusions—must be of immense value; and that the researches received at his hand the care they deserved will be manifest from the fact he mentions, that in "the precautions, variations, and repetitions observed and executed with the view of rendering its results secure, the separate vessels employed in the inquiry (Spontaneous Generation) have mounted up in two years to nearly ten thousand."

In the course of such investigations, and in such hands, many collateral facts of great interest for their novelty, and instructive to future experimenters, must occur; to one or two of which we will briefly refer. The initial fact of the use of a beam of light to show when air is free from particles, and the proof that when so demonstrated to be optically pure it is incapable of inducing, or introducing, life in the shape of organic germs, we have already alluded to. The same is equally true of water, even distilled water being as sensibly infectious as an infusion swarming with bacteria. Seeking, therefore, for water absolutely pure from particles some water was obtained from the centre of a block of ice, with every precaution to keep it free from contamination with ordinary or impure air, and "was probably the purest human eye had ever seen"; still the scrutiny of the concentrated beam showed it to contain myriads of ultra-microscopic particles, "whilst it proved to be as infectious as the water from any ordinary tap."

Of the minuteness of the particles thus recognisable by the beam, we may gain some idea from the following. Some of a solution of ten grains of mastic to 1000 of alcohol was dropped and briskly stirred into a jar of distilled water. Under light it was of a beautiful cerulean hue; this colour arising wholly from the light scattered by the mastic particles, which were yet so minute as to elude a magnifying power of 1200 diameters, and which still further passed through forty layers of the best filtering paper "sensibly unimpeded;" yet a comparison of the light scattered by the mastic with that in the ice water proved the suspended particles in the latter to be far smaller though still infectious. Infinitesimal as they are, however, these mastic particles may be separated by mechanical means from the liquid by filters of porous earthenware, as has been shown to be the case in respect to the contagia by which living animals may be infected, and also organic infusions, distilled water, tap water, or ice water. In connexion with this filtering process a very interesting fact was noticed by Professor Tyndall. He had found that when a powerful beam of light was condensed in a dark room and in dusty air, and his breath was conveyed through a warm tube across the focus, a diminution of the scattered light was first observed, culminating towards the end of the expiration in the breaking of the white track of the beam by a black gap, the blackness being due to the total absence from the expired air of any matter competent to scatter light. To the filtering power of the lungs thus shown, as suggested by Professor Lister, is due the fact that blood effused into the pleura in the case of a simple fracture of a rib, undergoes no putrefaction, even though the air admitted from a wound in the lung may be enough to cause emphysema; whilst, on the other hand, a quite different result attends the introduction of common air directly through a wound in the chest-wall.

Some curious effects were brought to light in respect to the sterilisation of infectious liquids by heat. During six months of careful experiment on many hundreds of tubes containing infusions, simply boiled for five minutes and then exposed to air optically purified either by self-purification, by rest, by filtration or calcination, or *in vacuo*, not one tube failed to be sterilised. In the following autumn, however, hay infusions as employed in previous experiments were found to bear fifteen minutes or more of boiling with impunity, and it became manifest that this power of resistance was due to the age and dryness of the hay employed;

on other infusions being tried with increased precaution and prolonged boiling the result was the same, whilst on repeating the experiments in a fresh locality the result was that the liquids which before resisted two hundred minutes' boiling were now as before sterilised by five, and it was subsequently clearly shown that the difficulty had arisen from the fact that the contagium was carried from the old, and, so to say, saturated air of the laboratory, in which were several bundles of desiccated hay, from which fine dust arose, and which was conveyed by the vessels used, or clothes of the assistants. This dust itself proved to be very fruitful and highly resistant. Subsequent considerations of the conditions of germs at different stages of their development led to the inference that repeated short boilings, at intervals, would catch them, each at its most sensitive condition; and such proved to be the case, boiling repeatedly for even a fraction of a minute at a time being more effectual than one boiling for ten times the period, and being, moreover, "infallible."

Our space has only allowed us to indicate the bent of Professor Tyndall's work. Running concurrently with the researches of Pasteur, Sanderson, Koch, Lister, and others, happily now too numerous to name, through whose labours so much light has been thrown on septic influences and the propagation of disease by specific contagia, we gladly welcome the observations of men like our author, who, from their own department of science, come forward to help and render assistance by collateral elucidation. The question of spontaneous generation is not, we fear, by his elaborate research disposed of for ever, for it is incapable of absolute disproof; but at least he has shown it to be not only a needless supposition, but as inconsistent with known facts as it is unsupported by experience. There is much yet to be learnt, much confusion to unravel, especially in reference to "bacteria," under which term seem to be comprised without distinction organisms which we are told are rife in all sorts of simple infusions, as well as in septicæmia, in pyæmia, in anthrax, and many other diseases, specific and otherwise, apparently as their contagia. Possibly when these germs, elements, contagia, bacteria, &c., are shown to be so prevalent, so indestructible, and so minute as to be undiscoverable by the highest powers of the microscope, we can hardly expect ever to know all about them. Still, every difficulty removed facilitates progress; every fresh gleam of light tends to illuminate what bids fair to prove this to be in its scientific advance the most brilliant and philanthropically useful of all periods in the history of medicine and surgery.

Deaf-mutism and the Education of Deaf Mutes by Lip Reading and Articulation. By Dr. ARTHUR HARTMANN. Translated by J. P. CASSELLS, M.D. London: Baillière, Tindall, & Cox. 1881.

THIS is an interesting little compilation on the question of deaf-mutism. The author seems fully acquainted with the statistics of his subject, and with the scientific facts which underlie it. He is strongly of opinion that the best means of communication for deaf-mutes with their fellow-creatures is by lip reading and articulation. The reason of this is obvious, for the sign language is only of use in communicating with deaf-mutes and others who have acquired the art of reading it and speaking it, while the articulated language promises a medium of communication with all their fellow-countrymen. It is right to say, however, that those who have specially studied and who have been engaged in teaching the deaf and dumb, are not quite agreed upon the subject, and there seems good reason to believe that the teaching of articulate speech to deaf-mutes often presents difficulties which are all but insurmountable. Dr. Hartmann is a little prolix in style, but the work contains so much real information that we can honestly recommend it to any who are seeking for knowledge on the subject of which it treats.

THE AFGHAN WAR.

WE have received from India a copy of the "Special Report on the Hospital Organisation, Sanitation, and Medical History of the Wars in Afghanistan, 1878–79–80," by Surgeon-General Crawford, the Principal Medical Officer of the forces in India. It does not contain, nor does it profess to be, a detailed history of the medical and surgical occurrences of the period; this must be hereafter prepared from the reports of the medical officers in charge of the various divisions and brigades, and from the regimental returns. But it is important and instructive as showing from an administrative point of view the preparations made to carry out efficiently the medical service, the difficulties encountered in doing so, and the practical lessons taught by the experience of the two campaigns. It possesses an additional interest as an official expression of the opinion of the Director-General elect on the subject of the mode in which the medical service should be conducted in the field in India. In noticing briefly some of the more important points in this report, we shall not take them up exactly in the order in which they are arranged in it. The war, including the two campaigns, may be said to have lasted two years, having been commenced in November, 1878, and terminated in October, 1880. The average strength of the Bengal European Army was 9769 non-commissioned officers and men; the admissions into hospital in the two years were 24,461; the deaths by disease were 1075, and by injuries 208, making a total of 1283; the *annual* ratio of admissions, therefore, was 1252; of deaths by disease 55·02, and of deaths from injuries 10·64 per 1000. Among the latter are included 46 men of the 10th Hussars who were drowned in crossing the Cabul river, having missed the ford. Deducting these the ratio of deaths from injuries was 8·29 per 1000. These figures, however, refer only to the Bengal troops. Dr. Crawford says:—"The weekly and annual returns supplied by the Bombay army are so incomplete that no table for that portion of the army can be supplied; but it may be incidentally mentioned that, at the defeat of Maiwand on July 27th, 1880, it was found, when the whole of the survivors had come in, that the losses amounted to 964 combatants killed, 108 wounded, and 7 missing; 331 followers were also killed, and 7 wounded." We trust that when the history of the war, promised in the last volume of the Army Medical Department Reports, is prepared the returns and reports necessary to complete the statistics of the Bombay Force may be forthcoming. Dr. Crawford also states, "Regarding native troops, the average strength of the Bengal Regular Army in Afghanistan was 15,091 in 1879, giving 35,928 admissions into hospital—i.e., 2380·8 per 1000 were admitted into hospital, with 1282 deaths, 1222 from disease, and 60 from battle." It is not very clear whether these numbers refer to the admissions and deaths which occurred in 1879 only, or, as in the case of the European troops, in the two years of the war; but, presuming the whole period to be included, the sickness was in the *annual* ratio of 1190, the deaths by disease of 40·49, and by injuries of 1·99 per 1000 of mean strength.

When the invasion of Afghanistan was decided upon, in September, 1878, Surgeon-General Ker Innes, then Principal Medical Officer in India, prepared a memorandum showing the principles on which the medical service was to be conducted, which was approved by the Commander-in-Chief, and submitted for sanction by the Indian Government. Notwithstanding the importance and urgency of the subject this was not given till Nov. 8th, and it was not till Feb. 21st, 1880, that the "*Précis* of Field Service Medical Arrangements," intended as a handbook for the guidance of the medical officers, was published by authority. In spite of this delay the system thus introduced worked very satisfactorily. Dr. Crawford gives a clear summary of the arrangements, of which "the object in view was twofold—first, to relieve the army of all unnecessary *impedimenta* in the form of sick, carriage, establishment, and stores; and second, to distribute the medical element so as best to meet all the contingencies likely to arise on field service." As we noticed fully[1] the *précis* of Surgeon-General Innes when it was promulgated it seems unnecessary again to enter into detail on the subject.

[1] See THE LANCET of 14th Dec. 1878.

Among the difficulties connected with the introduction of the general hospital, in lieu of the regimental system, with the army already in the field, was that of the equipment in use being unsuitable for the service, in consequence of which it became necessary to obtain, partly by local manufacture and partly by requisition on England, a light equipment capable of being carried by mules or ponies. We are informed in the report that "a committee, which had been ordered to be convened shortly before the war, but could not assemble until after the close of the operations in 1879, have carefully considered the medical requirements of troops on service; and, as the recommendations of the committee have received the approval of Government, no such difficulty need be felt in future campaigns." We sincerely trust this may prove to be a correct forecast; but we have a strong feeling on the subject of the obstructive power of red-tape and of official procrastination.

Dr. Crawford gives a brief statement of the relative advantages of the general and regimental hospital systems. He remarks:—"The desiderata of a medical and hospital establishment accompanying a force on active service are, manifestly, that it shall be efficient, that it shall dispense with needless reduplication of stores and appliances, and that its transport shall be reduced to the lowest mark consistent with efficiency. In these respects the regimental system cannot compare with a consolidated one." Again, "If sickness in an army is to be prevented, if the wounded are to be promptly succoured and saved from evils and complications which are not very remote sequences of wounds, if the diseases engendered by the overcrowding of wounded men are to be avoided, and if the skill of the most skilful surgeon or physician is to avail, will all depend upon his patients being brought to him in a condition to profit by his skill, and by their being lodged, fed, and subsequently transported from him in such a way as not to counteract what has been done. All this depends upon administration and organisation—that is, the proper distribution of men, animals, and material. . . . . If the system which deals with, and provides for, the safety of the aggregate of sick and wounded be not based upon sound and practical principles, success in these directions cannot be attained." On the important point of the hospital establishment required under the two systems it is shown that the European Force in the Kuram Valley had a general total of 297 servants on the consolidated system, while 525 would have been required under the regimental—a difference which effected a marked reduction both in the cost of the hospitals and in the amount of transport.

Among the difficulties encountered in carrying on the service, in addition to that already noticed of the change to a new system after the troops had actually set out and while the existing material was not adapted to the work, was the dual administration of the British and Indian medical departments. Although one medical head, "selected indiscriminately from either service," was appointed to each division in the field, "frequent references were necessary to the respective heads of the British and Indian medical services—sometimes to one and sometimes to the other—occasioning the delays and inconveniences of a divided authority, which might at any time, through divergence of opinion, have become dangerously obstructive." We trust that in the amalgamation of the two services will be found a practical remedy for such an evil. Another great difficulty arose from the want of a well-organised and trained Hospital Corps, the kahars and dhoolie bearers being mostly physically unfit for their work, wholly untrained, and very badly equipped, and there was no properly organised staff of non-commissioned officers to superintend them. We believe that, owing in a great measure to Dr. Crawford's representations, an efficient hospital corps is now being formed, and this difficulty will probably not be experienced in future campaigns. In the report before us Dr. Crawford discusses in some detail the questions of the transport of sick and the various descriptions of sick carriage employed, of the tentage, the bedding and clothing, the weight carried by a soldier, the rations of the troops and the dieting of the sick. Into these we do not propose to enter; we would merely note that in consequence of the increased work of the troops and the inferior or uncertain quality of the meat, an addition of a quarter of a pound of meat and of bread was made to the ration; that preserved potatoes or compressed vegetables were found valuable when fresh could not be procured; that desiccated soup and Erbswürst were issued in cases where food had to be hastily prepared, and were found to be well adapted for special emergencies; and that owing to the difficulty of procuring fresh milk, condensed milk was used with much advantage to the sick on service. Dr. Crawford suggests that a supply should be always kept ready, for any emergency, of Australian meat, pickles, preserved potatoes, compressed vegetables, cocoa, lime-juice, and Erbswürst, with assorted concentrated soups and condensed milk for the use of the sick, and a supply of tobacco for troops on service. "The want of tobacco is a sore privation to the soldier, who is generally a smoker; it is not advisable in a campaign or epidemic to alter the habits of a lifetime, and when there is hard marching and scanty food, tobacco soothes and sustains." Of the medical equipments and stores under trial Dr. Crawford speaks favourably of the field panniers, the field companions, and the surgical dressing packets; he doubts the value of the gelatine medicine preparations, and of the surgical wadding and tissue. As we recently noticed the celebrated Cabul-Candahar march of Sir F. Roberts' force in our review of the report on the health of the army for 1879,[2] we do not consider it necessary to advert to the account here given of it.

Dr. Crawford speaks very favourably of the "staging system" of sick carriage, and points out clearly the advantages attaching to its successful working. "This system, by which from thirty-five to thirty-eight sick had been regularly evacuated every other day, had been followed previously to the arrival of General Stewart's force at Cabul, the bearers going and returning from post to post, and doing single marches every day. By this means the amount of sick carriage, supplies, and equipment at each post could be, and had been maintained, on a reasonably small scale, but still quite adequate for efficiently carrying out the evacuation of the sick from front to base, and it is believed that, up to the time the staging was discontinued, there were no cases of chronic disease or injury remaining in the field hospitals and rest depôts *en route*. Nor is it probable that the medical or hospital supplies, carriage, or stores at any one post were more than actually required for the force at that post." The question of the relative advantages and disadvantages of short and long service is very clearly stated. The advantages of short service are that it tends to procure a celibate army, thus relieving the State of great expense, and "a reserve on a system practically the reverse of that hitherto followed; for in our previous wars (Peninsula, &c.) the places of the veteran troops in the field were taken by immatured recruits from home, while now the places of the young troops in the field would be filled up by the older soldiers from the reserve." The disadvantages are, the large proportion of immature men in the ranks, who are drilled but not trained; the difficulty of making and retaining good non-commissioned officers; the expense of invaliding and of transport for time expired men; and the weakening of discipline and *esprit de corps* by the constant fluctuations in the composition of the corps. On the subject of the effect of age on efficiency, however, Dr. Crawford observes: "It is a mistake to suppose that a soldier of over ten years' service is better than one of five; he very frequently is not so good. In cheerfulness, prodigality of life, and resiliency, the younger man notoriously enjoys the advantage. His physical defect, as far as campaigning is concerned, is want of endurance; his frame and constitution require good food and periodical rest; for a short, or a series of short efforts, a young man is quite as capable as an older one, but in sustained effort or labour he is manifestly his inferior." The previous medical history of corps has a most important influence on their efficiency on field service, those which have become saturated with malaria invariably furnishing high rates of sickness and mortality, consequent upon exposure. When, in addition to this, there are insufficient food, clothing, and raiment, bad shelter, and inadequate hospital accommodation and care, the sickness and mortality become excessive. There is reason to fear that from such causes the losses of the native troops and native followers were, in some instances, far beyond what they would have been had more attention been paid to the avoidance of preventable causes of disease. Dr. Crawford judiciously observes, "Strength is requisite for the physical exercises of a soldier: maturity for endurance; and courage, discipline, and *morale* will supply and perfect the remainder; but even these will not suffice if the dictates of common experience and physiological knowledge be cast aside. That the soldier must be fed in proportion to the work required of him, and clothed and sheltered in

[2] THE LANCET, August 27th, 1881.

accordance with the nature of the climate in which he is serving, are obvious considerations of prudence and State economy as well as humanity."

There is a brief notice of the prevalence of disease at some of the principal stations occupied by the troops; but we defer the consideration of this subject till the more detailed information which will doubtless be given in the next volume of the Army Medical Department's reports enables us to do justice to it. Dr. Crawford winds up his report with some practical conclusions derived from the experience of these campaigns. They are clear and judicious, and appear to have an important bearing on the successful working of the medical service, the comfort and well-being of the sick and wounded, and the health and efficiency of the troops on service; in all these respects they deserve the careful consideration of the military authorities. The report is an exceedingly good one, and is evidently the production of a man of administrative ability, who knows the work and how to do it. We believe that the Department has good grounds to congratulate itself on the selection which has been made of Dr. Crawford as the future head of the medical service of the army.

THE INTERNATIONAL SANITARY CONFERENCE.

AT a meeting of the American Public Health Association it was resolved, "That it is the duty of the general Government to invite foreign nations to co-operate with it in the establishment of uniform and effective international quarantine regulations." In accordance with this resolution a Conference of the several Powers having jurisdiction of ports likely to be infected with yellow fever or cholera was called by the President of the United States. In this Congress twenty-seven States were represented, including delegates of all European Powers, with the single exception of Switzerland. The American delegates presented an informal project, drawn up with exclusive reference to such international concessions as were necessary to enable the consular agents of the several Powers to obtain and to transmit to their respective Governments trustworthy information as to the sanitary condition of the ports at which they are stationed, and of vessels about to sail to their respective countries, each Government being free to apply its own measures of quarantine. A resolution was proposed, "To permit certain sanitary inspections to be made by foreign agents in ports of various nations, subject to such rules as are necessary for the safeguard of each country's sovereignty" and commercial interests; but owing to the persistent and successful opposition of the diplomatic delegates, it was not carried. The final act of the Conference is represented by the following resolutions:—

"1. Each Government shall have such an organised internal service as will enable it to be informed of the state of the public health throughout the whole of its territory.

"2. Each Government shall publish a weekly bulletin of the statistics of mortality in its principal cities and ports, and shall give such bulletins the largest publicity possible.

"3. In the interest of the public health, the sanitary authorities of the countries represented in this Conference are authorised to communicate directly with each other in order to keep themselves informed of all important facts which may come to their knowledge; but nothing herein contained shall relieve them from the duty of furnishing, at the same time, to the consuls in their respective jurisdictions the information they are required to give them.

"4. A centralised international system of sanitary notification being deemed indispensable to the successful carrying out of measures for preventing the introduction of disease, it is advisable to create international organisations to be charged with the duty of collecting information in regard to the outbreak, spread, and disappearance of cholera, plague, yellow fever, &c., and of conveying such information to the parties interested.

"5. 'Bills of health shall be in the form hereto annexed,' said form being that presented by the American delegates and borrowed from the National Board of Health.

"6. Bills of health shall be delivered at the port of departure by the responsible sanitary agent of the central Government. The consul of the country of destination shall have the right to be present at the examination of ships made by the representative of the territorial Government, under such rules as may be laid down by international agreement or treaty, and the authority to authenticate the bill of health and to add thereon such remarks as he may deem necessary.

"7. Bills of health granted in compliance with international rules should be issued gratis.

"8. A temporary and scientific sanitary commission shall be created by the nations most directly interested in protecting themselves against yellow fever, and by such others as may wish to take part in this arrangement, to be charged with the duty of studying all matters pertaining to the origin, development, and propagation of the disease. To carry out this object a draft of a convention was voted."

There was by no means agreement among all the delegates upon these points, many especially insisting that the examinations ought to be made by officers directly responsible to the Government of the country of destination, that the official returns in many cases would be too late, and that the plan involved too great expense. We hope that something will come from this praiseworthy effort of our American *confrères*. But even if the Conference be barren of direct legislative results, the careful attention paid to this important subject by the delegates of the various Governments, and the increased interest in maritime hygiene thus excited, must be productive of valuable indirect benefits.

PROPOSED ASYLUM FOR PUERPERAL MANIACS.

To the Editor of THE LANCET.

SIR,—As a magistrate for Middlesex, I have from time to time persons brought before me who are asserted to be of unsound mind; these number on an average in this parish fifty-two a year, two-thirds of them being women. Thanks, however, to the attention and consideration shown to these persons by the medical superintendent of the workhouse and infirmary, over 50 per cent. are discharged, the remainder being sent to asylums. Among these parties women, the wives of respectable mechanics and others, are frequently admitted suffering from puerperal mania and other causes consequent upon childbirth. These poor and helpless women when they are first admitted are in a pitiable state. They are generally, as is well known to you, very violent, destructive, and refuse to take nourishment; under these circumstances they require constant attention and care, and that, too, of no ordinary kind. The duration of these attacks is uncertain, sometimes ending in perfect recovery in a few weeks, at others lasting for some months; generally speaking, a perfect cure is the result. According to existing arrangements, these individuals are of necessity sent to lunatic asylums. It may be urged, in cases of this kind, that husbands ought to provide for the proper attendance upon their wives. This is, however, out of the question, and could not be entertained, not only on the score of expense, but also on account of the careful and constant watching required. When these women recover their senses they find themselves surrounded by some of the lowest classes of society, and are subjected to witness the filthy habits of individuals, and to listen to the most disgusting language. These are, however, but temporary evils, and are easily got over. Not so the fact that they and their children and relatives are branded for ever with the stamp of lunacy, that can never be obliterated. During the past year forty-five women were received into the asylums at Hanwell and Colney Hatch suffering from puerperal mania. Of these thirty-three were discharged recovered, one went home to her friends, two died, and nine remained under treatment at the close of the year. My object is to alleviate the suffering, present and future, of this class of our fellow-creatures, who are from natural causes so terribly afflicted, and I would suggest the erection of a separate hospital to contain 200 beds, under the supervision of the Metropolitan Asylums Board, for the reception of women suffering from puerperal and other diseases incident upon childbirth; the husbands, where able, and the guardians where necessary, contributing to their maintenance.

I am, Sir, your obedient servant,

Chelsea, Nov. 1881. H. W. G.

THE LANCET.

LONDON: SATURDAY, DECEMBER 3, 1881.

IT is opportune at this moment to refer to the answers of the Royal Colleges in England to inquiries by the Royal Commission on the Medical Acts. The inquiries had reference to the two great questions of medical reform. First, whether any alterations are necessary in the present licensing system, and, if so, what changes would be most beneficial to the profession and the public? Second, whether, in the opinion of the Colleges, the present constitution, powers, and functions of the General Medical Council appeared satisfactory?

It will be important to the Commission to know that, in referring to the Royal Colleges, they were referring to two very different bodies. In the case of the Physicians the reference was to the Fellows; in the case of the Surgeons the reference was to a much more limited body—the Council of the College. The answers were significant. It is not to be expected that in a great movement for reform and beneficial change existing authorities will see much reason for altering their privileges or rights. It is to the credit, however, of the English Colleges that they both recommend the one-portal system. The College of Physicians thinks the examining board to be constituted should consist of *all* the medical authorities at present existing. The College of Surgeons recommends that no person be registered as a legally qualified medical practitioner unless he shall have passed an examination in Medicine, Midwifery, and Surgery, *such examination to be conducted by two or more of the existing corporations.* It will be noticed that the instinct of self-preservation is strong in the Colleges, but the College of Surgeons evidently thinks two corporations enough to carry into the licensing system of the future. "Too many cooks spoil the broth," and it cannot be too strongly hoped that the Commission, if it does not recommend an examining board in each division of the kingdom, will, at least, get rid of a superfluous corporation in each division. The Royal Colleges, between them, represent the whole of Medicine, and the retention of superfluous bodies will not only complicate schemes, but will entail a permanent tax on the profession which there is absolutely nothing to justify. This view has found expression in various representative meetings of the profession and before the Commissioners.

One feature of the answer of the College of Surgeons calls for notice. It considers an examination in all branches of practice—Medicine, Midwifery, and Surgery—indispensable. It is creditable to the College of Surgeons, whose examination has hitherto, or till lately, been so defective as regards Medicine and Midwifery, to insist on the inclusion of these subjects. It cannot be doubted that the licensing examinations of the future will include them all, and that henceforth such an anomaly will not be possible as the registration of a general practitioner who has never been examined in Medicine or Midwifery. This is certain. But the point to which we direct attention is this. In advising an examination in Medicine, Midwifery, and Surgery, does the College mean to recommend a board for examining merely in clinical subjects, leaving the great fundamental verities of Anatomy and Physiology to be dealt with anyhow by the nineteen competing bodies as at present? Most of the scandals that have occurred in medical examinations have been in connexion with the fundamental subjects. And we cannot too strongly express our opinion that no solution of the existing problems will be satisfactory which does not provide for thorough examinations in Anatomy and Physiology as well as in Medicine, Midwifery, and Surgery.

In neither College was it thought advisable to express an opinion on the constitution, powers, and functions of the General Medical Council, and the modifications, if any, needed in them. Neither in the Comitia of the College of Physicians, nor in the Council of the College of Surgeons, would one expect to find strong opinions on this subject. The Colleges are both amply represented already, and yet it was felt that the constitution of the Council, and its powers, would be challenged had a discussion been taken. The independent members of both bodies would doubtless have shown that they were in accord with the profession in thinking the Council a body with too many "interests" to consider, with no real power, without sympathy with the profession, and without its respect.

THE study of the febrile state, which a few years ago received so much attention, has recently been to some extent lost sight of in the investigation of its causes. The question of the pathological physiology of pyrexia has, however, been the subject of an important series of investigations carried on at the Smithsonian Institute at Washington by Dr. H. C. WOOD, an able analysis of which by another worker in the same field, SENATOR, has lately appeared. In order to ascertain how far the elevation of temperature would account for the other symptoms which attend pyrexia, the temperature of animals—rabbits, dogs, cats, and pigeons—was raised by their exposure to the sun or in warm chambers. It was found that as the internal temperature rose the respiration became accelerated, and death occurred after convulsions and coma. The blood after death was neutral, or only doubtfully alkaline, in reaction. The muscles were in some instances acid, and could scarcely be made to contract with the strongest induced current. These conditions are exactly those met with in severe febrile disturbance in man and in cases of heat-stroke. In some other experiments the head of the animal only was heated, by means of a double cap through which warm water was made to circulate. Here also the phenomena were similar; death occurred when the intracranial temperature was 113° to 117° F., and earlier in the case of cats than of rabbits. In other points also the results of previous experimenters were corroborated—the acceleration of the heart's action by warmth, and the fact that by the abstraction of heat the effects of increased temperature could be to a certain extent prevented.

The next point investigated was the formation and regulation of animal heat, and especially the influence of section of the spinal cord on the temperature. The same variations were met with which have been noted by others: in some cases the section of the cord in the upper dorsal region was

followed by a rise, and in other cases, the conditions being apparently similar, by a fall in temperature. WOOD believes that the stronger the animal the more considerable is the elevation of temperature. He ascertained the loss of heat by means of a calorimeter, and found uniformly an increase of the heat given off. This increase was the greater the higher up the cord the section was made, always provided that the respiration was not considerably disturbed. In only two cases was there a slight diminution in the amount of heat liberated after section of the cord. In one of these the result was apparently due to the animal possessing an exceedingly thick coating of hair, and in the other the section of the cord was made below the origin of the roots of the splanchnic nerves. WOOD ascribes the loss of heat to the vascular dilatation which follows the section of the cord. But prolonged observations show that some time after the section of the cord the amount of heat given off falls considerably. The quantity of heat given off per hour was increased by nearly one-half during the first day after the section, and on the second day was only little more than one-half the amount given off on the day before the section. A comparison of these facts with the rectal temperature led to the conclusion that the actual amount of heat produced in the body was lowered by the section of the cord above the origin of the splanchnics. This is ascribed to the vascular dilatation, to the cessation of muscular exercise, and to the lessened metabolism; although the influence of rest is probably inconsiderable, since little movement took place in the calorimeter before the section of the cord was made. In order to exclude the effect of the lowered temperature of the body, in further experiments the temperature of the air of the calorimeter was kept higher, and it was concluded from the facts observed that the production of heat after section of the cord was first lessened and then increased, the latter especially in vigorous animals; but some doubt attaches to this conclusion, since, when the air of the calorimeter is maintained at a considerable temperature, it is not easy to estimate with exactness the loss of heat.

In a further series of researches the influence of the vaso-motor centre on the medulla was more carefully investigated, after WOOD had convinced himself of the accuracy of the statements of previous investigators as to the position of this centre in the floor of the fourth ventricle. Division of the medulla at this spot, or lower down, caused a fall of temperature, but a rise occurred if the division was made higher up. Separation of the medulla from the pons Varolii caused an elevation of temperature only in dogs, not in rabbits, which WOOD explains by assuming that, in the small medulla of the rabbit, the vaso-motor centre is probably involved in this section. Calorimetric observations in these cases showed very different results from those obtained after section of the spinal cord or injury of the vaso-motor centre. Both increased formation and increased escape of heat were observed, and the former was less than the latter, so that the temperature of the body steadily rose. This appeared to indicate the presence of another unknown centre, higher up, governing the production of heat. He therefore endeavoured to ascertain whether, after separation of the medulla from the pons, irritation of a sensory nerve would lower the temperature, as it does under other circumstances. This was not found to be the case. Hence the conclusion was drawn that the action of such sensory irritation is not upon a centre below the point of section, but on a centre which must be situated in or above the pons. Further calorimetric observations demonstrated that in the dog destruction of the first frontal convolution and the vicinity of the cruciate sulcus causes a sudden increase of the formation of heat, and that a decreased formation ensues when this region is stimulated. Neither destruction nor irritation of this part influenced the blood-pressure.

The next point examined was whether, in fever, the increased temperature is due to an increased formation or diminished loss of heat. A critical examination of the experiments of LIEBERMEISTER and of LEYDEN led to the conclusion that the facts they ascertained show that there must be some increased formation of heat. Experiments with dogs led to the same conclusions as those reached by SENATOR, that, in the pyrexia produced in the dog by injections of pus, the formation of heat is commonly greater than on corresponding days of fasting, but is less than may result from an abundant supply of food. In the course of the pyrexia the production of heat usually rises with the increased temperature of the body, but sometimes the formation of heat may be excessive, although the temperature of the body remains near the normal. Unfortunately, however, the animals often refuse food on the first few days of their pyrexia, and thus are not in precisely the same condition as in the control experiments. In the case of rabbits, two incomplete series of investigations were made, which also led to the conclusion that in pyrexia the production of heat is increased, but the large amount of food always present in the alimentary canal of rabbits renders them unsuitable for these experiments.

If the formation of heat is estimated, as by SENATOR and BURDON-SANDERSON, from the final products of the tissue metabolism, it is found that, with adequate nourishment, there is less production in fever than in the non-febrile state—a conclusion which is in harmony with calorimetric observations under the same conditions of nourishment. Hence WOOD concludes that fever is a disturbance of nutrition in which there is an abnormal production of heat by chemical processes in the accumulated material of the organisms, and of which the surplus is sometimes greater, sometimes less, than the loss of heat which occurs during fasting. The emperature of the body, depending, as it does, on the difference between the production and loss of heat, is no exact measure of the chemical changes in the tissues.

An incidental conclusion was also reached that the ordinary evening exacerbation in fever is concomitant with an actual increase in the production of heat. The investigations have also corroborated those of SENATOR, that during the process of digestion there is an increased formation of heat, and further that, independently of the ingestion of food, there are regular variations in the production of heat in the course of each period of twenty-four hours. The maximum production is in the afternoon, between one and seven; the minimum occurs less regularly, late in the evening or in the morning.

The last question considered is whether the process of fever depends primarily on the blood or on the nervous

system. Although in some cases the immediate cause of pyrexia is the passage of pyrogenic material into the blood, in other cases a purely nervous origin must be admitted, and the clinical and experimental facts abundantly established the influence of the nervous system on the production of heat. Thus WOOD found that if the spinal cord were divided during a febrile attack there is a greater increase in the escape of heat, and a greater diminution in the production of heat, than after the same operation in the non-febrile state. Irritation of a sensory nerve causes also in fever, as in health, a prompt fall in the temperature of the body. Hence the conclusion that the inhibitory nervous apparatus is not paralysed in fever, but is merely in less energetic action than in the normal state.

WE have already placed the leading facts of a recent painful case at the Birmingham Borough Lunatic Asylum before the profession. So far as these "facts" involve, or are involved in, a criminal charge against an attendant of the institution they are at present *sub judice*, and comment is therefore not permissible. There are, however, two aspects of the case, and of the general question raised, with which we are free to deal. First, it has been alleged, and a coroner's jury—which strangely enough omitted to return the "cause of death," the main, indeed only, legitimate object of the inquiry—has found, that "the doctors were guilty of negligence in the early part of the case." This grave charge arises out of a purely surgical fact, and is, in truth, neither more nor less than an imputation of *malpraxis*. The deceased, a lunatic, died from rupture of the bladder, which the coroner's jury have found to have been caused by a kick, and an attendant stands charged with inflicting the injury. Thus far the facts are plain; but it has been further alleged and sworn by different witnesses that the deceased could not empty his bladder, that a catheter was used previous to the patient's admission to the asylum, that the circumstance of its being used was reported to the asylum medical officers when the patient was placed under their care, that no catheter was used in the asylum, and finally, that the rupture of the bladder was indirectly caused by its being distended; or, in other words, that the kick might not have ruptured the bladder if it had been duly emptied. Obviously, this amounts to an allegation of *malpraxis*, by neglect, on the part of the asylum medical officers.

Now, we have nothing whatever to do with the persons making this charge, or with those against whom it has been made; but, looking at the results from a purely surgical stand-point, we must be excused for saying that it is by no means satisfactory. In the course of the inquest it was proved that the medical officer *did* examine the abdomen with a view to ascertain whether the bladder was or was not distended, and none of the usual evidences of retention were present. Again, it does not seem probable from the history of the case and the description of the post-mortem appearances, that any considerable accumulation of fluid in the bladder occurred during the time the deceased was in the asylum. The interval which elapsed between the rupture of the bladder and the death of the patient was more than sufficient to account for the appearances found after death.

Two assumptions were made against the asylum medical officers. First, that they omitted proper tests for the condition of the bladder; second, that they did not pass the catheter. To both these assumptions we must take leave to demur. However desirable it may appear to pass a catheter in every case of supposed or alleged retention occurring in the case of a person of unsound mind, it is not the practice to do so, nor would a too ready recourse to the use of surgical assistance in such cases be good treatment. We say this advisedly, and we are of opinion that the facts ought, in justice to the medical officers of the institution, to have been placed before the coroner's jury. If a catheter were passed simply as a measure to ascertain whether it was necessary to pass one, no small percentage of the inmates of asylums—both male and female—would need the catheter. Whatever may be the practice in hospitals, the catheter is not used as a *test* instrument in asylums, and never can, or ought to, be.

In short, nothing was omitted in this case which it is usual to do in ordinary cases of the class, and we cannot help feeling that a charge has been made on insufficient grounds, and unduly pressed against the medical officers of the Birmingham Borough Asylum, a charge which, be it remembered, rests wholly and solely on the allegation that they did not use the catheter in the absence of any physical indication that its use was needed. We venture to think that if the practice not only of asylums, but of hospitals, and of the profession at large, were investigated, it would be found to be precisely that which was adopted at this asylum. Why, then, was the course pursued in this case made the basis of a grave imputation on which a coroner's jury could found a censure which amounts to a charge of *malpraxis*? The second assumption made in this painful case was that the medical officers ought to have passed the catheter, *as a matter of course*, because they heard it had been used previously. Do those who make this assumption know the danger of trying to pass a catheter in the case of an excited or excitable lunatic? It cannot be supposed that the perils of the practice so strongly recommended were adequately realised. It will be a black day for the inmates of asylums when catheterism becomes a part of routine practice. A very little experience in the management of lunatics would have placed this matter in a different light.

We fear the medical officers of the asylum have been—no doubt conscientiously and inadvertently—wronged by having their corn measured in a bushel which is not and cannot be used in estimating the practice of those who have to deal with the insane. With reference to the inadequacy of the staff at the asylum, and its general management, we will at present say nothing, except that it is most devoutly to be desired that these matters could be thoroughly investigated, not only in reference to the Birmingham Borough Asylum, but the great majority of county and borough asylums throughout the country. It is, however, amusing that the case should be referred to the Commissioners in Lunacy, who are the responsible authorities under whose patronage and supervision these and other abuses prevail. We had written thus far when the painful news reached us that the Medical Superintendent of the Asylum, Mr. GREEN, has succumbed to an attack of pneumonia, brought on by attendance at the inquest.

Doubtless this gentleman's death was hastened by the anxiety and mental and nervous depression caused by the assault roughly made on his professional reputation towards the close of a long and useful career. We can only record our deep regret at what we must ever regard as a most painful and humiliating business.

DURING the past twelve months extensive trial has been made, on the Continent more than in this country, of Pilocarpine in the treatment of Diphtheria. The use of such a depressing agent in a disease in which there is a marked tendency to asthenia may seem hazardous, but the agent has been given for its local influence, to aid, by augmenting the buccal secretions, in the separation and detachment of the false membranes. The method originated with Dr. GUTTMANN, of Cronstadt in Silesia, who in October, 1880, published the results obtained by this method in eighty-one cases. Of this number, fifteen were, in his opinion, so severe that they would probably have died under any other method of treatment, and thirty others were of moderate severity. All the cases recovered. The abundant and continued salivation established by the pilocarpine detached the membranes, removed the infiltration of the tissues, and in most of the cases the pharynx recovered its normal aspect in from one to three days, a little longer time being required in a few cases of greater severity, but in only two cases did more than a week elapse before recovery.

Results so startling, in a disease so grave, naturally led to the trial of the method in all countries, and during the past year it has been extensively employed in Germany, Russia, and France. The results of the trials have been published in many instances, and those of the several observers have been collected by M. PICOT in the last number of the Swiss *Revue Médicale*. A comparison of these facts with some recorded elsewhere does not, it must be confessed, afford much support to the alleged value of the method of treatment. The total number of the cases in which it has been tried is 129, and of these no less than forty-seven have died, showing a mortality of about 36·5 per cent., or more than one in three. At the same time, the impression conveyed by massed statistics is apt to be misleading on such a subject. It is clear that in a considerable number of the fatal cases the treatment was commenced too late for life to be saved by any means. Some of the patients, for instance, were already in a state of collapse, in which the fatal end would be rather hastened by the general, than hindered by the local, action of pilocarpine. In other cases the treatment was commenced after tracheotomy had been performed, and under such circumstances it can hardly be said to have had a fair trial.

The results obtained by different observers varied in some instances so much that they can only be accounted for by assuming a difference in epidemic severity. LAX, for instance, treated ten children: the condition of six was grave, and that of two was desperate, but all the cases recovered, the false membrane coming away freely in the abundant mucus and saliva. On the other hand, ALFOERI tried pilocarpine in six cases, all of which proved fatal. Several of those who have employed the method arrived at the conclusion that it is more serviceable in adults than in children, and in pharyngeal than in primary laryngeal diphtheria. Of the cases treated by NEUMEISTER, for example, all the adults (four in number) recovered rapidly, but one-half of the children died. He concludes that it ought not to be employed in the case of children. Of the cases treated by DEHIO, all those (fourteen in number) in which the diphtheria was limited to the pharynx recovered, although several of them were most severe, while of ten cases of primary laryngeal diphtheria one-half died; but it is right to add that the treatment was commenced in most of them too late to afford it a fair chance. Moreover, in the case of a child aged eleven, recorded by LEREBOULLET, it can hardly be doubted that pilocarpine obviated the necessity for tracheotomy. Attacks of urgent dyspnœa had occurred, and asphyxia appeared imminent. Two injections each of five milligrammes of pilocarpine had been given, and six hours after the second an abundant salivation took place, and a quantity of false membrane was expelled. The child slept calmly afterwards, and, the treatment being continued for a few days, the symptoms rapidly disappeared.

It may reasonably be asked whether an agent so powerful as pilocarpine is not likely to be injurious if it fails to do good? On this point also diverse opinions have been expressed. GUTTMANN could trace no prejudicial influence in any case in which he tried it; nor could KUSTER. But ARCHAMBAULT, who lost every severe case thus treated, observed the sweating to be followed by extreme nervous depression; ALFOERI attributed to it a pulmonary œdema, which proved fatal to one of his patients; WEISE lost three cases from collapse soon after commencing the treatment; and NEUMEISTER attributed to it extreme feebleness or sudden irregularity of the pulse, which he observed in six cases. These opinions are not reassuring, although the symptoms observed may in some cases have been due to the disease, and not to the remedy.

The drug has been administered by the mouth, skin, and rectum. The former method was the one employed by GUTTMANN, the average dose of pilocarpine being one-fiftieth of a grain for a child and one-twentieth for an adult, given, with a little pepsine, in water acidulated with hydrochloric acid, and every dose was followed by a small quantity of Hungarian wine. He urges most strongly the importance of regular administration, the interruption of the treatment by sleep being always succeeded by an increase in the local symptoms. He attributes to the wine the prevention of any injurious effects from the depressing influence of the pilocarpine. Some of those who have employed this agent have not followed GUTTMANN'S method rigorously, the doses given by ARCHAMBAULT, for instance, having been considerably larger. By some, hypodermic injections have been employed, and with success; while LEPIDI-CHIOTI produced salivation in ten or fifteen minutes by enemata containing half a grain of pilocarpine.

The conclusion from this survey of the facts is certainly disappointing to the expectations raised by GUTTMANN'S original results, which become the more remarkable, and even mysterious. But the facts at present ascertained are insufficient to decide the influence of pilocarpine in diphtheria, and further observations are necessary in cases in which the agent is employed sufficiently early to afford it a fair scope.

THE afternoons of three successive Wednesdays have been occupied with an inquest touching the death of Dr. WILLIAM BOOTH, surgeon, aged forty-one, lately of 80, Spencer-street, Goswell-road. The deceased was admitted into St. Bartholomew's Hospital on Nov. 12th, and died the next day. The reports in the general press have made our readers pretty familiar with the main facts of this painful case. Dr. CASSIDY and Dr. SHERRARD, who accompanied the deceased to the hospital, complained that there was unnecessary delay in admitting him, and that before being taken into a ward he was placed in a room with open windows—a circumstance which, as he was suffering from bronchitis and laryngitis, was calculated, they alleged, to accelerate death. Never was a complaint examined with more attention. After hearing evidence for three days, and a careful summing up by the coroner, the jury deliberated for over an hour, and arrived at the following verdict:—

"That death arose from natural causes; that, under the circumstances, it would have been better had arrangements been made with the hospital authorities for the admission of the patient; that there was delay in getting the deceased removed to a ward, but when in the ward every attention was given to him; and the jury recommend that a porter should always be present in the entrance-hall."

It is good for the public, and it is not bad for hospitals, that they should be subjected to constant and vigilant criticism. We ourselves are never slow to blame them when we think blame is deserved; but we cannot help thinking that in this case the hospital has received at the hands of the jury but scant justice. Even Dr. CASSIDY and Dr. SHERRARD withdrew the charge of accelerating the death. The jury found that every attention was paid in the wards. The complaint therefore narrows itself to this: that there was some delay in getting the deceased removed to a ward, and the jury recommend that a porter should always be present in the entrance-hall. The delay was so slight that it could only have been prevented by the friends of Dr. BOOTH making arrangements beforehand for his admission. With three porters in the entrance-hall, it would be impossible to prevent "some delay" in receiving a patient into a hospital in regard to whom no information had been previously supplied to the authorities. The actual delay, under the circumstances, could scarcely have been less. Mr. HENRY SMITH, the house-physician, says he was first told of the arrival of the deceased at five minutes past four. He went without a moment's delay, leaving another patient, and in a quarter of an hour later he saw deceased undressed and in bed. In prescribing for the deceased, he very courteously had regard to Dr. SHERRARD'S account of what had been found useful outside, and ordered inhalation of the vapour of benzoline. Before five the patient was seen by the senior assistant physician, Dr. DYCE DUCKWORTH.

A more serious question, it seems to us, was the propriety of removing the unfortunate patient at all from his house in the state of complicated and general disease in which he was—albuminuria, bronchitis, a solid lung, double pleurisy, aphonia, &c., with liability to severe attacks of laryngeal spasm. The step seems to have been justified by the extreme absence of comfort and nursing attention in the apartments of Dr. BOOTH; but the process could scarcely have been more promptly or less injuriously carried out than it was in the absence of previous intimation to the hospital authorities, with whom there seems to have been an unreasonable impatience on the part of Dr. CASSIDY and Dr. SHERRARD.

Annotations.

"Ne quid nimis."

THE LINACRE PROFESSORSHIP OF PHYSIOLOGY.

THE chair of Physiology at Oxford, vacant by the death of the late Professor Rolleston, has been filled by the appointment of Mr. H. N. Moseley, M.A., F.R.S., Fellow of Exeter College, and Assistant-Registrar at the University of London. Mr. Moseley is well known as a comparative anatomist, and more especially for his good work as a naturalist with the *Challenger* expedition. The University of Oxford has made a good choice in selecting him from amongst the several candidates; and as a Radcliffe Travelling Fellow in 1869, his appointment will be additionally popular at his *alma mater*. The duties of the Linacre Professorship have hitherto been very composite; and in the noise of suggested reforms in scientific teaching at Oxford, Professor Rolleston's lofty aims and devoted attachment to science have been too lightly passed over. As has been recently well said by Dr. Acland, "he laid the foundation of a philosophical school of biology, human and comparative, where, before he came, was a ploughed field." The many able pupils whom he trained will not soon forget his warm affection and his singleness of purpose. As Professor Rolleston laid the foundation of biological science in Oxford, so his successor will have to build the superstructure. Biology has made such strides during the past twenty years, that no single professor can again hope to occupy Professor Rolleston's unique position. Anatomy and physiology have to a large extent been divorced from each other, and separate teachers for each of these great divisions of science must be appointed at every university and college in which they are expected to make their special lessons and teachings manifest. Human anatomy, or rather the anatomy of the vertebrata, is almost a distinct branch from that of the lower orders, and every anatomist is sure to exhibit a preference and to have a fuller and more exhaustive knowledge of the one than of the other. Comparative embryology is of recent growth, and whilst its detailed study is most fascinating, the manner in which it lends itself to vast and important generalisations is certain to powerfully influence many scientific minds and mould their thoughts. The new *régime* in science at Oxford which must shortly come will have to take into consideration these developments of modern biological research. Even if Oxford be not intended to become a most valuable school for the preliminary scientific training of some of our best physicians and surgeons, the lamp of science must not be allowed to get dim amongst the classical lore of the ancient university, and to secure a steady and brilliant light a division of scientific work and teaching along the lines we have indicated is inevitable and cannot be long postponed.

UNDERGRADUATES' LODGINGS.

A DISCUSSION took place at a congregation held last week at Oxford, with regard to certain amendments in the new lodging-house statute which was passed last summer. By this statute it was proposed to appoint two officers, the one to supervise the lodging-houses generally, the other a sanitary officer. The sum required to carry out the sanitary inspection will be about £400 per annum, and this it is proposed to raise by an annual tax on each undergraduate of

ten shillings and sixpence. It will be remembered that at the time the scheme was first proposed the action of the University created a considerable amount of ill-feeling among the town authorities, who no doubt felt compunctions of conscience that a duty which so manifestly belonged to them, but which they had neglected to perform, had been taken out of their hands. The opposition thus raised was, as we pointed out at the time, merely splenetic, and had no legitimate basis, since the lodging-house delegates had not exceeded their powers, nor trenched upon the province of the local board. This being the case, it is probable we shall hear of no more opposition from that quarter, and that, as in other matters of sanitary improvement connected with the town, they will have to acquiesce in a proceeding that public opinion considered inevitable. It is with feelings of satisfaction that we thus see the University of Oxford taking the lead in organising measures to secure the safety of its students, by at length adopting a measure that THE LANCET for the last five years has strenuously advocated. In time it is to be hoped the University of Cambridge will follow the example thus set by the sister University, and take steps to protect the undergraduates from the many sanitary evils that abound in that town. At present the licensed lodgings are inspected by a clergyman, but we would suggest that though his certificate might satisfy an anxious parent as to the purity of the moral atmosphere, still inspection of the house by a medical officer of health under the control of the University would probably be more effectual in securing the student from ill-health or possible death.

THE LATE PROFESSOR BUSCH.

GERMANY has just lost by death one of her foremost surgeons in Dr. Wilhelm Busch. He was born in 1826 and studied in several German universities, particularly in Berlin, and then completed his professional studies in Edinburgh, London, and Dublin. When thirty years of age he was appointed Professor of Surgery in the University of Bonn, and for twenty-five years he filled that post with great success. In earlier life he studied pathology and comparative anatomy with great earnestness, but more recently he had been fully occupied with the demands of a very large practice. He was a thoroughly accomplished surgeon, a fine operator, and a devoted teacher and friend of his pupils. He published a work on surgery which hardly obtained its deserved success on account of the form of its arrangement—topographical. An operation for the cure of Dupuytren's contraction of the palmar fascia is well-known in Germany by his name. At one of the recent congresses of German surgeons, Busch excited a good deal of interest by a paper on the successful treatment of the earlier stage of epitheliomatous cancer by lotions of bicarbonate of soda, in which he described results of considerable promise. Dr. Busch was Surgeon-General to the 8th Army Corps, and served during the campaigns of 1866 and 1870. He was present at Gravelotte and several other of the chief battles of the latter war, and greatly distinguished himself by the display of unusual administrative ability. For some time after the close of the war he devoted great attention to an experimental study of gunshot injuries, and tested the effects of bullets fired into various parts of the body, in different directions, &c., and also compared the effects of the different forms of bullet now in use. The influence of Busch's British education was apparent in all his after-life, and he partook largely of the characteristics of an English surgeon. He was also accustomed to speak in high terms of English surgery and hospitals, particularly of the greater attention paid to hygiene here than in his own country. He attended the recent meeting of the International Congress, but his friends were then distressed to notice a failure of vigour in a man of extraordinary energy and physical endurance. His change here did not restore him to health. One of the latest signs of the esteem in which he was held was his being entrusted with the operation recently successfully performed on the Empress at Coblentz. His death is a great loss to German surgery, for he was still in the prime of life—fifty-five,—and was possessed of qualities which he constantly turned to the best account.

ARSENIC.

THE *modus operandi* of the action of arsenic has been a subject of much dispute amongst toxicologists and therapeutists. The smallness of the dose required to kill, and the absence in some fatal cases of such lesions as might reasonably be expected to be present when its powerful action as an irritant might have been exerted, have led to various opinions as to the organ or tissue on which it acts. The editors of the edition of Pereira's "Materia Medica"—Alfred Taylor and Owen Rees—published in 1854, remark that there is as much difficulty in accounting for its toxic as for its therapeutic or medicinal effects; that all that can be said is the blood is poisoned and rendered unfit to sustain life, and that the chemical hypothesis of the action of the poison is wholly untenable. Other observers, as Jäger, referred the fatal effects of arsenic to the lesions that may be observed in the heart, the contractility of which is destroyed. Brücke, on the other hand, believed that death resulted from suppression of the functions of the brain. More recently Sklarek, experimenting on frogs, considered that he had demonstrated that the phenomena presented by arsenical poisoning are due to paresis of the excito-motor centres of the heart, and there can be no doubt that arsenic lowers the blood-pressure in the arteries, and the frequency of the pulse. Lesser, however, has shown that neither the muscular tissue of the heart, nor the vaso-motor centres, nor the great sympathetic nerve is paralysed. The latest observer, M. Vryens, whose experiments are detailed in the October number of the *Archives de Physiologie*, has sought to reconcile these discrepancies. His experiments were made on rabbits and dogs, and he first attempted to determine the influence of arsenic on the circulation by injecting a drop or two of a 25 per cent. solution of arsenious acid into the jugular vein in some animals, and in others the same quantity beneath the skin. The effects observed were gradual diminution of the blood-pressure in the arteries, interrupted occasionally in the less acute cases by short periods of augmented pressure, and slowness and irregularity of the pulse; the temperature undergoes a remarkable reduction of 1° or 2° C., and in this M. Vryens is in accord with all observers. Sklarek, for example, noted a fall varying from 2° to 3° C. in the cat; Lolliot 1° in the dog and 4° in the rabbit; and Lesser no less than 7° in the rabbit; the differences being probably dependent on the dose of the poison, the strength of the animal, and the quantity of food in the stomach, or other circumstance affecting the absorption of the poison. The kidneys undergo serious alterations; the renal secretion is suppressed and its composition changed; it almost always contains albumen, and sometimes sugar. A few of the red and white corpuscles of the blood may commonly be observed in it. In subacute cases hyaline cylinders, granular cylinders with fat deposits in them, and granular epithelial cells may be seen. Lastly, he has observed that on spectroscopic examination, besides the two bands indicating the presence of hæmoglobin, there is a third band of absorption in the red which is nearer C than D. This band disappears immediately on the addition of a reducing agent, and is apparently due to the presence of peroxyhæmoglobin or methæmoglobin, and indicates the condition of disintegration or dissolution of the blood. There seems to be some evidence in favour

of Orfila's view that arsenic is stored up in the secreting organs, for the metallic ring which can be obtained from the combustion of a fragment of kidney or liver is larger than that from other organs. A small ring can, however, be obtained from the mucous membrane of the intestines, which is a fact of importance. On the whole, M. Vryens believes his experiments show that the entire nervous system, including especially the vaso-motor, pneumogastric, and sympathetic nerves, is, if not paralysed, at least reduced to a state of paresis, and that it is through this system essentially that the serious effects of arsenic are due. This agrees well with its powerful tonic influence on the nerves when given in small doses. He gives, however, no explanation of the extraordinary tolerance or resistance to its effects which may be gained by its constant use, as shown by the inhabitants of the Tyrol.

THE REMOVAL OF FEVER PATIENTS IN MARYLEBONE.

FURTHER inquiries into the circumstances attending the outbreak of typhus fever in Marylebone have led us to conclude that there is at least some unnecessary delay in dealing with cases of infectious disease which might easily be avoided. The general public has but little conception of the amount of red-tapeism brought into action before the removal of one patient from an overcrowded house can be secured. A good typical case occurred a few days ago in York-court, which we will describe in its full details as a specimen of what happens all the year round. The house in question is let out in tenements, and there are in all no less than fourteen children under one roof. In one of the rooms a labourer—who has been out of work for three weeks—his wife, and child live together. The child falls ill with scarlet fever, and by some fortunate circumstance the fact is brought to the cognisance of the medical officer, who at once calls, and is informed that a neighbouring practitioner is attending to the case. The medical officer, recognising a true case of scarlet fever, seeing the total impossibility of isolation and the danger which threatens the thirteen other children living in the house, suggests immediate removal to the hospital, to which, as usual, the parents object. It is at this juncture that the unwieldy machinery of the parish has to be set in motion. As this is a pauper case, the medical officer is obliged to refer it to the Poor-law authorities, and, as the relieving officers will not accept any other certificate than that of the Poor-law doctor, the latter in his turn must be communicated with. In due time the parish doctor calls and examines the patient, recognises the true character of the disease, and confirms the opinion of the medical officer. The relieving officer, having now the approval of the Poor-law doctor, goes in due course and notifies to the parents that the child ought to be removed; but the parents again refuse. Thereupon the relieving officer, whose intervention is not supported by any power to act, is obliged to report the case back again to the medical officer, and the latter is now at last able to apply for a magistrate's order to remove the patient. Fortunately this order is generally easily obtained, but even then the application must be made at the hours when the magistrate is sitting. Resistance rarely goes further than this; but it may be easily imagined how many hours and days must be lost before all these formalities are duly observed. In the case in question the sanitary inspector, Mr. Lightfoot, had to devote a whole day exclusively to this one child, and was therefore able to remove the patient in the extraordinarily short space of twenty-four hours. But the inspector's district embraces a population of 155,000 persons, and stretches from Tottenham-court-road to the confines of Hampstead. He alone attends to all the zymotic cases in this huge borough, so that if several poor and recalcitrant people fall ill simultaneously, we fail to see how the one inspector and the one medical officer could possibly remove them to the fever hospital in time to prevent the disease from spreading. Nor is subsequent disinfection altogether satisfactory. Where, as is often the case, a family live in one room, they cannot be excluded from that room for more than a few hours, and it is a question whether the fumigation, when restricted to so brief a time, is sufficiently effective. Again, no means have as yet been devised by the Sanitary Authority for dealing with the clothes worn by the persons inhabiting the fever room. In non-pauper cases the matter is not complicated by the intervention of the Poor-law authorities. Arrangements have been made with the Highgate and the London Fever Hospitals for the immediate removal from Marylebone district of all such cases, the vestry or the patient paying the customary fee. But pauper cases are by far the most numerous and the most likely to create an epidemic. Surely, as every moment is of the utmost value, the certificate of the medical officer of health should alone suffice to obtain the magistrate's order for removal; but this is not so in the great parish of St. Marylebone.

HATS AND HEADS.

AMONG the recently published statistics of head measurement, as inferred from the sizes of hats, are the following:—"Lord Chelmsford 6¼ full, Dean Stanley 6⅞, Lord Beaconsfield 7, the Prince of Wales 7 full, Charles Dickens 7⅛, Lord Selborne 7⅛, John Bright 7⅛, Earl Russell 7⅛, Lord Macaulay 7⅜, Mr. Gladstone 7⅜, Archbishop of York 8 full." These measurements are reproduced from statistics by Mr. F. F. Tucker, and the contemporary in whose columns they are reproduced is responsible for the remark—"Whatever may be the case with regard to brains, it would scarcely seem from these figures that hats are a criterion of brain-power." It would be strange, indeed, if any moderately intelligent person supposed the hat, or even the head, could supply the measure of brain-power. The late Dr. Prichard finally disposed of the notion that cranial measurements could be accepted as brain measurements. Since his day the student of cerebral development has ceased to rely on what used to be called "Phrenology." The chief point of interest as yet elicited from the direct investigation of brain measurements would seem to be that the cerebral organs commonly found in the class of brain-workers show evidences of being locally and specially developed, and probably, as a physical consequence, are irregular, and for the most part unsymmetrical. Hereafter, probably, light may be thrown on the subject of special or regional developments, both in regard to their personal growth and transmission by heredity. For the present, however, we can only say that neither the hat nor the head furnishes trustworthy indications of mental power and capacity, and that the only feature of interest as yet noted is the curious fact of unequal development and consequent want of symmetry.

THE QUANTITATIVE STUDY OF ANÆSTHETICS.

THE claims of official duties will probably stop for a time the scientific researches which M. Paul Bert has hitherto pursued so vigorously, and a paper recently presented to the Académie des Sciences may reasonably be expected to be the last for the present. It deals with the relation between the proportion of chloroform in air necessary to cause insensibility, and that which is incompatible with life. He finds that in all cases the proportion which destroys life is just double that which causes anæsthesia. Thus in the case of mice, six grammes of chloroform in 100 litres of air cause insensibility, and twelve grammes are fatal. When the animal breathes a mixture about the middle of the "working zone" between anæsthesia and death it quickly becomes and

remains quiet and insensible, even for two hours not requiring any attention or concern. When chloroform is given on a sponge or lint the animal or patient breathes a proportion of chloroform uncertain or variable. The working zone is much narrower in the case of chloroform than in that of ether, with which between the active and fatal doses there is an interval of forty grammes, while in the case of nitrous oxide it is still wider. The most delicate matter is the determination of the lower limiting dose, which varies much in the case of different animals.

Ignorance of what has been ascertained in other countries is a characteristic of modern French scientists who are constantly rediscovering that which is familiar elsewhere. M. Paul Bert recommends, apparently under the idea that the suggestion is original, an apparatus for the administration of chloroform essentially the same as the familiar apparatus of Clover, and Mr. Tom Bird has pointed out in a letter to a contemporary that the facts now discovered by M. Paul Bert were ascertained more than thirty years ago by Dr. Snow.

THE ASSISTANT-REGISTRARSHIP OF THE UNIVERSITY OF LONDON.

THE appointment of Mr. H. N. Moseley, F.R.S., to the Professorship at Oxford University, vacant by the death of Professor Rolleston, will once more throw open an office, always much sought after, in the University of London: that of Assistant-Registrar. Mr. Moseley has been fortunate to exchange an office which had no bearings upon his special pursuit for one which will enable him to devote himself entirely to it, and we may congratulate him upon this and the University of Oxford upon securing the services of so accomplished a scientist. We may at the same time be permitted to express a hope that the Senate of the University of London will be able to select his successor from among the very large circle of their own graduates. The selection will be difficult, for there is certain to be no lack of candidates; but there can be no reason at all for preferring members of another university to fill an office the duties of which are best known to London graduates; and, without in the least desiring to question the suitability of previous appointments to this office, we certainly trust that they may not be taken as precedents, but rather as exceptional departures from what should be regarded as a guiding principle in such patronage.

THE PRESS AND VIVISECTION.

THE lay press has been busy with the question of vivisection, which, owing to the recent abortive prosecution, has attracted a good deal of public attention. In some journals remarks hardly compatible with ordinary candour or enlightened and well-informed common-sense have appeared. But there have been many counter-blasts. *Punch* forcibly expresses one view of the question in its current number, where Mr. Du Maurier represents "Miss Diana" as horror-struck with the cruelty of "a physician who has tried the effects of extreme terror and bodily fatigue" on a rabbit with a view to clear up problems connected with mental disorder, while enraptured with the "sport" of coursing: "Thirty minutes' gallop" after a hare, "without a check!—wasn't it lovely!!—and I was in at the death"!!! Across the border the *Scotsman* has published a very able leader. There are three articles on "Vivisection, its Pains and Uses," in the December number of the "Nineteenth Century," by Sir James Paget, Professor Owen, and Dr. Wilks. Each of these essays is excellent, and deserving of attention, as each is a calm statement of facts by men able to appreciate and state them. Sir James Paget, in his well-known graceful style, demonstrates that "the pain and other miseries inflicted by vivisection are less than those inflicted in many practices encouraged by sensible and humane persons," and that their utility is at least as great. Professor Owen is chiefly concerned to refute a statement made in criticism of his address at Folkestone, that vivisectional experiments were not necessary to determine the properties and actions of the arterial system which suggested the Hunterian operation. Dr. Wilks' vigorous article refers to the several addresses delivered at the meeting of the International Congress, and by Professor Humphry at Ryde, and then lays stress on the fact that the pursuit of knowledge is the end of all vivisection, its attainment alone possible by this means, and, even when without immediate practical benefit, such knowledge is to be highly valued.

THE ELEMENT OF BRUTALITY IN OUR CIVILISATION.

THE element of brutishness in our civilisation, what shall be said about it? Is it increasing or diminishing? Could it be worse?—or is it only so disgusting now in the light of better social manners? Without answering these questions, let us consider another, Are we doing all that can be done in a remedial way? Some of the things that happen cannot be literally described in journals which do not obviously pander to low and degraded readers. This difficulty involves a hushing up and a quick dismissal of unpleasant cases. But this does not tend to healing. We do not mend a slough by covering it over with plaster-of-Paris. So it had better be fully understood that very brutal things go on, and, what is worse, go on without much exciting or disturbing public opinion in the neighbourhoods where they occur. A man kicks his wife to death at Piddinghoe in the sight of and within the hearing of other Piddinghoe men, and they do not interfere with this abuse of the husband's superiority. One point of superiority in the husband, be it noted, was that he was probably a little less drunk than his wife. She had been entertained in a public house five hours; he had been there only three. It would be almost charitable to suppose that the noble men of Piddinghoe who "passed by on the other side" while kicks against a woman's ribs were resounding in the air, were themselves disabled by a prolonged *sederunt* in the "Royal Oak" beerhouse. An incident not less deadly, and certainly not less brutal, had to be very euphemistically reported by our contemporaries in the proceedings of the Central Criminal Court last week, in which five young men, of ages varying from twenty-one to sixteen, were charged with such coarse and indecent assault on a drunken widow as ended in her death. They were all acquitted of *murder*, though there was no doubt that the death was caused by the rough treatment pitilessly dealt out by at least three of the five young men, who were found guilty or pleaded guilty of indecent assault. One lesson of these dreadful cases is that women themselves must be more careful of their habits. But for the woman drinking, probably neither of these cases would have disgraced our civilisation. A daily contemporary reports that out of fifty prisoners brought before Mr. de Rutzen, in Marylebone, lately, twenty-eight were women. He added, it was a disgrace to see the number of women brought to that court from day to day charged with drunkenness. It is not different in the North. In the two Hartlepools there is reported in the *Newcastle Chronicle* an increase of 20 per cent. in police-noticed cases of drunkenness. In Middlesborough these cases have gone up from 449 in last year to 731 in this. Can the publicans themselves do nothing to abate the heavy responsibility under which they lie in connexion with the brutality of our civilisation? Can they not condemn a landlord who entertains a woman in his house for five hours? Can they not combine to disallow drink to men and women

whom they must often know, and whom they must see visibly sinking into brutality and degradation? If the large section of respectable licensed victuallers do not see their way thus to clear their trade in this matter, legislation cannot rest where it is.

HUNTER'S CHLORAL.

THE usual weekly death from chloral occurred on Saturday last. Mr. V. A. C. Amcot, Justice of the Peace for Lincolnshire, aged thirty-six, was found dead in bed at his residence in Portsdown-road, Maida-vale, with a small bottle by his side labeled "Hunter's solution of chloral." Nothing was known to render improbable the reasonable inference that the chloral had been employed to produce sleep, and that an overdose had been taken. A few weeks ago we had to record the death of a lady in Suffolk from hydrate of chloral, and we pointed out, as did Dr. Danford Thomas to the jury on Saturday, the need there is for further restriction on the sale of poisons in the form of patent medicines. The jury added a rider to their record of "Death from misadventure," expressing their sense of the importance of such amendment of the Poisons and Patent Medicines Acts as would secure the necessary restrictions. We wonder how many more lives will have to be sacrificed before the desired amendment is effected. Meanwhile it is very important that medical men should do their best to make the public aware of the uncertain action of chloral. No poison is so variable in its effects. The dose which may be taken by one person with impunity is fatal to another, and the effect even on the same individual varies much at different times. No medicine is more unsafe for self-administration. There is, we fear, a tendency even in the medical profession to regard chloral as an innocent sedative, and, by recommending it as such, to convey to their patients a false sense of security in its use, which is in some degree responsible for the fatal events so frequently recorded. Every medical man should impress on his patients that chloral ought never to be taken except under special direction and from a medical prescription.

MEDICAL EXAMINATION IN THE UNITED STATES.

A VERY suggestive paper by W. B. Platt, M.D. Harvard and M.R.C.S. Eng., Baltimore, appears in the *Boston Medical and Surgical Journal* for Nov. 3rd. The multiplicity of medical boards in the States, and the cheap and easy system of medical qualification, are a grief to all respectable medical men. Every State is a law to itself in this great public matter, and the highest medical titles convey little guarantee of adequate education or examination. Dr Platt suggests that Congress should lay aside 50,000 dollars per year to institute a United States Examination in the capital of each State, independent of the teachers in each school, the board to consist of ten army and marine hospital surgeons. Certificates of preliminary examination in English, Latin, and German to be produced, also of four years of continuous medical study. The examinations, it is suggested, should be essentially practical, but embrace written and oral methods. The reward of those who pass is to be the permission of putting *U.S.* after their ordinary and local qualification. We are entirely at one with Dr. Platt, as all who wish to see international rivalry and recognition in medical education must be, in wishing to see the establishment of independent and efficient examining boards in the United States, and an abolition of the scandal of fifty or sixty local boards. We are not quite clear that army and navy surgeons would have the necessary knowledge of detail to make good examiners. This is, however, a question of detail. Dr. Platt makes a great suggestion, which deserves embodiment in Congressional legislation.

THE HOSPITAL SUNDAY FUND AND THE SURGICAL AID SOCIETIES.

THE Council of the Hospital Sunday Fund met on Wednesday at the Mansion House, Bishop Claughton in the chair. There were present Sir Sydney Waterlow, Cardinal Manning, Sir Edmund Currie, Canon Spence, Canon Fleming, The Rev. Dr. Kennedy, Sir Rutherford Alcock, Dr. Sedgwick Saunders, Dr. Glover, Mr. Willett, &c. A very important discussion took place on a report from the General Purposes Committee in reference to a proposal from the Surgical Appliance Society that the Hospital Sunday Fund should give grants in payment for surgical appliances through the Society, which, it was maintained, could do the work more cheaply, by reason of its contracts, than the Hospital Sunday Fund. The Council resolved unanimously that, as the Society seemed determined to adhere to its rule of requiring applicants to solicit for letters representing the value of the instruments needed, it could not recommend or make any grant to the Society. Not only so, but the Council of the Fund resolved almost unanimously to ask the meeting of the constituency, which will shortly be held, to sanction the appropriation of 4 per cent., instead of 2, for the purpose of purchasing surgical appliances for the poor. The Council has already exceeded the sum allowed out of this year's collection, and will have to apply for a bill of indemnity from the constituency. Unless the Surgical Aid Society and similar charities see their way clear to alter the rule, which operates so clumsily and cruelly on those needing help, it seems almost as if the Hospital Sunday Fund would supersede them altogether. We ourselves regret this, as every pound given to surgical appliances is taken from the grants to hospitals and dispensaries, whose pecuniary needs are extreme, and should be the first care of the Council of the Hospital Sunday Fund. We appeal to the committee of such societies to consider the drift of public opinion, and to deprive the Hospital Sunday Fund of the excuse for competing with them in this their most urgent work.

"FOOD IN ITS SEASON."

UNDER natural conditions the fruits of the earth are produced in their due season—that is, the season at which the surrounding conditions are favourable to, or in other words require, their production. The fact that a particular class of food is naturally placed at the disposal of mankind in a locality at a special season is, therefore, good presumptive evidence that it is both seasonable and suitable. Our modern conditions of life have, however, so subverted the operation of natural laws that it is no longer possible to draw this deduction. With the facilities we now possess for the conveyance of men and goods, it is almost impossible that the population of any district should be, so to say, indigenous; and as regards food, a distribution of produce takes place which prevents any argument on the principle that "what is ought to be." It accordingly happens that many of the articles of diet we commonly employ, and some of those we regard as staple commodities, are not seasonable so far as we are concerned. On the contrary, they are most unsuitable to the conditions under which we consume them. When to this is added that our likes and dislikes, our appetites and loathings, are in the main artificial, it must be evident that it is almost idle to talk of "food in its season." Nevertheless there are times and seasons when particular classes of flesh and fruit may be most properly eaten. It would be worth while to give this matter more practical consideration than it has hitherto received. It is impossible to visit any of the metropolitan markets or busy thoroughfares, more especially those crowded with shops from which the fairly wealthy classes are supplied, without being impressed with the conviction that the ten-

dency of fashion is rather to act in defiance of Nature than at her suggestion in the matter of food. The most unseasonable fruits and vegetables are the most sought after, probably *because* they are difficult to procure and proportionately costly. The same rule applies to the meats and descriptions of fish in the shops; the dearer sorts, because either too early or too late, or produced by special artifices, are those which the retail shopkeeper lays himself out to show, and which the public prefers to buy. This is a very serious and most unsatisfactory line of disobedience to the teachings of the great mistress. It should be the care of, at least, the weakly to select not the rarest but the most plentiful, and therefore presumably the most appropriate description of food. The appetite of the convalescent patient is not, in a healthy sense, promoted but rather weakened by pampering, when the "choicest," by which is meant the least readily accessible, articles of diet are provided for him. If a special sort of food is plentiful—not because it has been thrown on the market by a foreign supply, but because it has been naturally produced in the locality—it may be safely regarded as wholesome. There are, of course, limits to the application of this rule, but intelligently interpreted it may be accepted as a principle, that to feed well and seasonably we should live on the produce of the country in which we reside, and by preference accept those commodities which Nature most bountifully supplies. The recognition of this principle is of moment to everyone, but it is especially important that it should be recognised by, or for, those who are not robust feeders.

BILIARY FISTULÆ.

A CURIOUS example of multiple biliary fistulæ has been communicated by Kosach to the Medical Society of Cologne. The cystic duct was completely obliterated. The gall-bladder, in consequence apparently of the irritation of biliary calculi, had contracted adhesions to the duodenum, with which it communicated by a large fistulous opening. Near this was another opening by which the gall-bladder communicated with the colon. A third fistula existed between the duodenum and the colon. The common bile-duct was distended, and its cavity obliterated, by two biliary concretions. These lesions were not suspected during life. The woman presented no jaundice, in spite of the closure of the ducts, on account of the free passage for the bile into the intestine. She had never suffered from hepatic colic. The chief symptom was constant diarrhœa, which caused fatal exhaustion, in spite of a "canine appetite," which she strove unceasingly to satisfy.

HOVE AND BRIGHTON.

A CORRESPONDENT writes:—"You hit Brighton tolerably hard, '*re* the fever,' the week before last. Why not apply the spur to Hove? For some time past they have had numerous cases of variola; last week nearly forty cases were reported, the disease having broken out afresh. They have been and are in a sad dilemma. They applied for admission to the Brighton Sanatorium, and were refused. As the interests of Brighton and Hove are one, I should have replied to them, 'You would not join us; nevertheless, we will admit some of your cases provided you pay three times as much as one of our patients.' Hove has just erected a town hall at the expense of about £40,000, yet could not spend £3000 upon an infectious disease hospital, though they knew they were dependent (for the reception of pauper cases) on a rural union, Steyning. A rich and prosperous town trusting to such a feeble prop! By paying adequately, could not a sheltered spot for a temporary erection have been secured in that vast and isolated area between Hove and the Dyke? By not being able to cut short the disease it spreads into other districts."

"TIGHT-LACING."

DEATHS from "tight-lacing" have been of frequent occurrence for many years past, and a few more or less can make no difference to the fashionable world. Dr. Danford Thomas, the Coroner for Central Middlesex, says he is personally cognisant of four or five such painful sacrifices to an ideal conception of the human figure, which is totally at variance with fact, and opposed to the laws of Nature. In the most recent case of this class recorded, an aged woman who died from syncope was found to have so compressed her body by "tight-lacing" that the stomach was, as it were, divided into two portions, one being thrust upwards so as to hamper the movements of the heart, whilst the other was forced downwards. It may be alleged that the death of a woman at seventy years of age cannot be held to be evidence against the urgent evils of the practice. We lay the greater stress on the case because it is clearly not available as evidence of urgency. It is rather significant as a proof of the injury which the human body will long endure, without the extinction of life. It cannot be pretended that a stomach ought to be compressed as this poor woman's had been. She lived on, in spite of the mal-treatment to which her figure was subjected in the interests of fashion. It cannot, therefore, be argued that, inasmuch as the deaths from "tight-lacing" are not as numerous as they might be, no serious harm is done. It is evident that extreme violence may be used, and grave mischief may be done by "tight-lacing," even when the victims of this stupid and baneful practice are not killed outright. Many of the maladies to which women are subjected are the direct consequences of their habits, and the vagaries of dress and the artifices of the toilet are among the most pernicious. Although it is vain to argue with women, the facts must be stated, however little may be their influence on the female mind by vanity distraught.

POISONING BY MISADVENTURE.

ONE of the saddest and most serious cases of accidental poisoning by medical misadventure which we have ever had to record occurred last week at Poplar, and was the subject of an inquest on Saturday by Sir John Humphreys. A woman named Chant, the wife of a dairyman, went on Wednesday to the surgery of a Dr. Harvey for some teething powders. The surgery was apparently in charge of an unqualified assistant named Cavan. In the surgery were two bottles, alike in size and colour, one containing "cooling powders," the other pure morphia. The latter should have been in a cupboard, in which alone poisons were kept. He gave the woman two powders, and, from the terrible result, clearly must have dispensed the morphia instead of the powder. The two powders seem to have been given to two children, respectively aged seven months and three years, both of whom quickly died. A child of another family, aged nine, had a similar powder, and also died. The verdict of the jury was "Death by misadventure," with a well-deserved censure for carelessness. How many more lives must be sacrificed before dispensers recognise the necessity of distinguishing poisons by a well-marked peculiarity in the bottles in which they are kept? It is not enough to provide a separate place in which they are to be kept. Poison bottles, like other things, are often where they ought not to be; and then, if there is no distinction between them and others, a so-called accident is certain at some time to occur. The fluted bottle, which impresses on the mind the nature of its contents, even in the dark, is an effectual safeguard. Occasional carelessness in dispensing, however much it is to be condemned and regretted, cannot be prevented beforehand; but it is incumbent on the proprietor of every surgery, as far as possible, to secure that the effects of such carelessness shall not lead to the substitution of a poison for a harmless drug.

MEDICAL TEMPERANCE.

WE have every sympathy with the cause of temperance in the use of stimulants, though we have no feeling in common with those who would make total abstinence a craze. It may be, and probably is, desirable to limit the use of alcohol in workhouses to strictly necessary purposes, but we cannot but regard the policy of depriving the aged poor of their accustomed stimulant, on the eve of a hard winter, as one of cruel parsimony. Whatever unphysiological physicians may say to the contrary, alcohol is food itself, and it promotes the evolution of heat, and in certain stages the process of assimilation. When persons have been accustomed to take alcohol in some form for many years, it is mischievous and perilous to enforce abstinence. We do not assert that health cannot be preserved without the use of alcoholic stimulants. We know by experience that these things can be dispensed with, though we are by no means prepared to affirm that those are the better or the happier who make a self-righteous habit of abstaining from them. Let the advocates of "teetotalism" propagate their views by every means in their power, but let them remember that this is not merely a free country, but one which is professedly governed on principles of equity. If that be so, it is not fair to take advantage of the declining years of life of the poor, when they are dependent on the public bounty, to make them abstainers. By all means bring any legitimate influence to bear on the hale and "able-bodied," but leave the "aged and infirm," who have nothing to hope for except an easy death, their accustomed stimulant, though, forsooth, it be only a cordial.

CARBOLIC ACID IN THE CURE OF HYDROCELE.

DR. R. J. LEWIS, of Philadelphia, has recently recorded his experience of the use of pure carbolic acid for the radical cure of hydrocele and some other cysts. His plan of procedure is to tap the hydrocele in the ordinary manner, and then with a syringe having a long nozzle, which passes quite through the cannula, he injects into the emptied sac from thirty to sixty grains of pure crystallised carbolic acid, liquefied by a minimum quantity of water of glycerine—10 per cent. Removing the cannula, he then manipulates the sac. Dr. Lewis states that this treatment causes no pain at the time, only a feeling of warmth in the scrotum, followed by numbness. After about twenty-four hours plastic inflammation comes on, as from the use of iodine; in his experience, lasting over nine years, he has never known it fail to effect the radical cure of the hydrocele, and to cause suppuration in the sac. The treatment by iodine as now practised is no doubt very successful, but in some instances—by no means constantly—the injection causes most intense pain; and if by the use of carbolic acid this can be entirely obviated, it will certainly possess one great merit. Unfortunately Dr. Lewis omits to mention the number of cases in which he has tested its value. If useful for hydrocele, there are other similar affections—cysts, bursæ, &c.—where injections of carbolic acid may be advantageous.

AMBULANCES IN CIVIL PRACTICE.

MR. REGINALD HARRISON has forwarded to us a copy of a second issue of his pamphlet on the Importance of Providing Suitable Ambulances for use in Civil Practice. The subject, to which we have already drawn attention, has excited a good deal of interest, and Mr. Harrison wishes us to state that any member of the profession requiring information may have a copy of his paper forwarded on application. The new edition contains further illustrations of the system adopted in America.

THE GARFIELD MEMORIAL HOSPITAL.

OUR American friends have decided to erect a lasting memorial of a most worthy kind to their late President. Unlike the peoples and States of the Old World, who have chiefly shown their respect to sovereigns by erecting tall columns, ornate "memorials," or ugly statues, they have determined to perpetuate Mr. Garfield's memory by erecting a large hospital to bear his name. This fount of charity is to be of the purest kind, its wards are to be open to all without reference to colour or creed; "to be a sufferer in need of help will be the only passport required to enter its doors and receive its aid." It is intended to erect the hospital in Columbia. Appeals to subscribe to the fund are being scattered broadcast over the States, and clergymen of all denominations have joined in making collections at their churches, as far as possible simultaneously, on the plan of our "Hospital Sunday." We have little doubt that there will be a very generous response to the appeal. The virtues of the late President were of no mean order; his character, his success, and his painful and fatal illness so heroically met, appeal to all hearts. Probably no memorial, after his own lingering experience of pain and weakness, and of the comforts of skilled medical advice and intelligent kindly nursing, would have been considered by him so fitting as a hospital.

QUEEN'S COLLEGE, BELFAST.

DURING the visit of Earl Cowper to Belfast last week one of the first public institutions which he visited was the Queen's College, where he was presented with an address from the President and professors of that institution. They were able to state that the history of the College had been one of rapid and uninterrupted progress. In the first decade the average attendance of students was 189, in the second 368, in the third 400, while last session, which was the first of the fourth decade, 508 were enrolled. Since the opening of the College in 1849, 3625 students have been trained in it, of whom 1168 have graduated in the Queen's University. Although the institution by the extinction of the Queen's University has been deprived of its distinctive status as a University College, yet it is firmly believed that by the continued countenance and support of the Government, by the zeal and energy of the professorial staff, and by increased efforts to adapt the training to the requirements of the country, the College will not only retain its prestige, but will even materially advance its proud educational position.

THE ETHICS OF HERBALISM.

IT is very lamentable that a young man should in 1881 be ill for three months with pain in the bowels and chest, and finally die of hæmorrhage from the bowels, without ever having been attended by a regular medical practitioner. This is, however, part of the boasted freedom of the nineteenth century. The inquest on James Waters, a workman employed by the Bath Gas Company, showed that for three months past he had been ill as above described. Not long since he retired from the Royal Marine Artillery, and while in that service he had yellow fever. At the post-mortem examination, Mr. Green and Dr. Fox found enteritis, which they referred to previous attacks of yellow fever, and not to any irritant. The jury arrived at the following verdict: "We find that James Waters died from inflammation of the bowels, and that the immediate cause of death was hæmorrhage into the bowels, the consequence of long-standing disease. The jury desire to express their regret that proper medical assistance had not been obtained, as perhaps under better treatment the man's life would have been prolonged." All sensible people will share the regret expressed by the jury; and if juries would more frequently express

themselves so, and forward their verdicts to the Home Secretary, many lives would be saved and much suffering prevented. The deputy-coroner, Mr. Robt. Biggs, spoke very strongly on the subject, and still more so on the fact that the man called in to see the deceased—"Professor Boyes," as he styled himself—had falsely put medical titles on his labels, and that he not only used them falsely, "without any diploma whatever," but gave as a justification for doing so "that anything might be put on paper." This is curious morality. The coroner expressed his intention of seeing whether for the titles used the herbalist could not be prosecuted. We fear in the present state of the law, as the titles used refer to American colleges only, they are not punishable. The coroner would do some service by sending the facts of the case to the chairman of the Royal Commission on the Medical Acts, as throwing light on the intelligence of the people and the morality of herbalists. The latter point was further illustrated by the discovery of iodide of potassium in the medicine. The law should be so amended as that the use of all misleading medical titles by persons without qualification should be heavily punished.

THE ROYAL COMMISSION ON SMALL-POX AND FEVER HOSPITALS.

THE Royal Commission on Small-pox and Fever Hospitals met on the 26th and also on the 28th ult., in No. 10 Committee-room at the House of Commons. A rumour got afloat that two of the earliest witnesses to be examined by the Commission will be Dr. Thorne Thorne and Mr. W. H. Power, two of the medical inspectors of the Local Government Board, who it is known have lately been engaged in making inquiry as to the influence of the Fulham Small-pox Hospital upon the neighbouring population. Notwithstanding the long-continued complaints regarding the injurious influence of the Metropolitan Asylums Board small-pox hospitals upon families residing in their vicinity, this, we believe, is the first time that the medical department of the Local Government Board has been called in to make inquiry into the subject, or that the subject has been recognised by the Board to have other than Poor-law bearings. The evidence of two of the most experienced public health inspectors of the Local Government Board as to the asserted injurious influence of one of the small-pox hospitals of the Asylums Board cannot fail to be of peculiar value and interest. But why has the Local Government Board remitted the results of their inquiry first to the Royal Commission, and shirked their own responsibility in the matter?

BROCAS v. PRIDDY.

ALTHOUGH after giving a most patient hearing for nearly three days to the evidence in this cause the jury were discharged without agreeing on a verdict, the case is one of great interest to all householders, as showing that the making of incorrect representations as to the sanitary condition of houses may bring lessors into trouble. It appears that a maiden lady named Brocas leased in June, 1877, of another maiden lady named Priddy, a house at Norwood, called "Berkeley Lodge," for seven, fourteen, or twenty-one years, at a yearly rental of £110. Miss Brocas took possession in the month following. Soon smells were perceived, and these got worse during the whole of 1878. One servant had scarlet fever, and Miss Brocas, her sister, and the housekeeper suffered in health. Consequently, in November, 1880, Miss Brocas quitted Berkeley Lodge and went into lodgings, and the present action was brought to recover damages from the lessor. Evidence was given to prove that the house drained into an unventilated cesspool, which had probably not been emptied since the house was constructed (some twenty-five years previously), and that the drain-pipe leading from the house to the cesspool was imperfectly jointed and broken, and had a fall of only two inches in fifteen feet. These facts were scarcely disputed, the only point left to the jury being whether there had been any real misrepresentation on the part of the defendant. The non-agreement of the jury is not to be wondered at. It would be an undoubted hardship if chance owners of property were to be made too rigidly responsible for a knowledge of facts which are always buried out of sight, and of which no plan is ever supplied to purchasers or lessees. If a plan of the drainage were incorporated in every lease, lessors would be careful in making statements, and lessees would have some certain facts to go upon. At present a lessee is almost bound to call in a surveyor; and this often means, we regret to say, that many imperfections are clumsily produced in hunting for those which perhaps, after all, never really existed.

THE PATHOLOGY OF ACUTE PEMPHIGUS.

IN a recent communication to the Société de Biologie, M. Gibier of Savigny has brought forward facts to show that the febrile form of acute pemphigus is entirely due to a bacterial organism. This consists, in the adult form, of a series of round elements arranged in the form of a chaplet. The individual elements appear to blend together at their points of contact. They present active movements. In the immature condition the elements are small, and are arranged irregularly, or in the form of a zoogloea. The organisms may be found in the liquid of fresh bullæ, and in the urine, and they multiply if submitted to artificial cultivation in these liquids. But the subcutaneous injection of the liquid of the bullæ does not produce the disease in either the guinea-pig, rabbit, or dog. Hence M. Gibier infers that it is not contagious. He has not succeeded in finding the organisms in the blood, although it is evident that if those in the urine and the bullæ are of the same nature, they must be contained also in the blood.

SMOKE-ABATING APPLIANCES.

AN "International Exhibition of Smoke-abating Appliances" is now open at South Kensington. It will doubtless attract some attention, and do a certain amount of good; but its practical bearing on the question of fogs and the smoke-nuisance is somewhat vague. As yet we are wholly in the dark as to the leading lines and main facts of this subject. Until the evil itself has been examined in a scientific spirit, it is little use to cast about for a remedy, still less to waste time and thought in an endeavour to discover which of several equally empirical methods and appliances for the cure of an unknown disease is the best.

THE DEFENCE OF SCIENTIFIC RESEARCH.

THE letters of Dr. Wilks and Dr. Lush, published by us last week, agreed in making a very happy suggestion. The time has evidently come for the profession to make a very determined stand in reference to vivisection, or it must be prepared to witness its extinction in this country. The idea suggested by both our correspondents is the formation of a "defence association"; and it has already received considerable support. Only the most preliminary steps have as yet been taken; but it is felt that any such association must be supported by the whole profession, and not by any mere section of it; and that its aims must be two—(1) the defence of physiologists, pathologists, and pharmacologists who may be unjustly prosecuted; and (2) the diffusion of knowledge of the value of the experimental method in medicine through the members of

the profession. For this purpose a fund must be raised, and suitable literature circulated. Many subscriptions have already been received, and prior to a meeting of subscribers and the appointment of officers, Dr. Lauder Brunton, of 50, Welbeck-street, W., has consented to act as secretary, and to receive subscriptions. We have already fully expressed our sense of the pressing importance of this question. This association commands our heartiest support; and we feel sure that on all sides, without any distinction, the members of the profession will join and support it. It is intended to make the subscription for membership low, so that the association may embrace the whole body of the profession, as far as is possible. We shall duly announce the meeting of subscribers.

SIR JAMES PAGET, BART.

WE understand that for some days past Sir James Paget has been confined to his bed with an attack of pneumonia, similar to other seizures previously experienced by him since he suffered from blood-poisoning. Sir William Jenner, Dr. Andrew, and Mr. Thomas Smith are in attendance upon Sir James. We are glad to be able to state he is decidedly better, and that it is hoped he will be able to travel to the south of Europe in a short time.

HEPATIC ABSCESS IN TYPHOID.

ABSCESS of the liver, so common in dysenteric ulceration of the intestine, is an extremely rare result of the ulceration which occurs in typhoid. An instance of the latter has been lately observed at Pesth by Bokai. A child, ten years of age, was admitted to the hospital after febrile symptoms had existed for some weeks. The only physical signs ascertained were some bronchitic râles and enlargement of the spleen. There was no enlargement of the liver. The fever was not influenced by quinine. Suddenly the abdomen became swollen and extremely tender, and, after some green vomit, the child died. A large abscess was found in the right lobe of the liver, and the pus had made its way around the portal vein to the subperitoneal tissue. The left lobe was studded with circumscribed abscesses. About a litre of pus had escaped into the abdominal cavity. Peyer's patches were swollen and in part ulcerated, the ulcers having grey edges and a pale base, characteristically typhoid in appearance.

THE LATE DR. HAYDEN.

THE following resolution was adopted unanimously at the first official meeting of the Faculty of Medicine of the Catholic University of Ireland:—"The Faculty of Medicine of the Catholic University of Ireland desire to place on record at the earliest time that is afforded them, their profound sorrow at the death of their dear and valued colleague the late Dr. Hayden, and their sense of the irreparable loss the faculty has thereby received. They beg leave to convey to the family of Dr. Hayden the expression of their deep sympathy with them in their great bereavement." The students of the Catholic University Medical School have also appointed a committee for the purpose of receiving subscriptions for a testimonial to the deceased.

THE FORMATION OF UREA.

TO ascertain the influence of the liver in the formation of urea, Solnikoff has established a direct connexion between the portal and the jugular veins by means of an india-rubber tube, an operation which, if carefully performed, is borne with impunity. Vascular pressure, at first lowered, soon returns to the normal. The urinary secretion was, however, completely arrested, and was not re-established until urea has been injected into the veins of the animal. The only effect of these injections was to raise the vascular pressure. The results were in no way modified by the preceding section of the splanchnic nerves. If, on the other hand, instead of the portal, the crural vein is placed in communication with the jugular vein, the urinary secretion is unchanged. It is thus clear that the urea which passes out of the system by the kidneys enters the circulation with the blood which issues from the liver.

MUCH sympathy has been excited at Newcastle by what might be called the untimely death of a young surgeon practising at the east end of the town, Mr. J. H. M. Gallwey, which took place a few days since, from typhoid fever of very short duration, during which time he was attended by Drs. Philipson, McBean, and Torrace, who did all that was possible to combat the disease. It is much to be feared that his powers of resistance were low, owing in a great measure to the anxiety consequent upon establishing practice in a town like Newcastle, where old connexions and local influence carry much weight. Mr. Gallwey was a graduate of the University of Glasgow, and acted as house-surgeon at the Royal Infirmary there; afterwards he passed into the Ottoman service during the Russo-Turkish war. He acted for some time as assistant at the Eye Infirmary at Newcastle, and also at the Children's Hospital. He was only in his twenty-ninth year, and has left a widow and four children. A committee has been formed, Dr. Philipson acting as chairman, to help Mrs. Gallwey with funds, which are sorely needed in her sad bereavement.

WE regret to learn that Dr. Giovanni Cabiadis, one of the physicians attached to the Ottoman General Board of Health, has died at Bussorah. Dr. Giovanni Cabiadis's name has been made familiar to English epidemiologists by the excellent work he did in Mesopotamia during the prevalence of the plague there in 1875–76. He was afterwards appointed the Ottoman Commissioner to the plague-infected district on the Lower Volga during the outbreak of 1878–79. Valuable summaries of his reports on plague in Mesopotamia and on the outbreak on the Volga were communicated to the Epidemiological Society by Dr. E. D. Dickson, physician to the British Embassy, Constantinople, and British delegate to the Ottoman General Board of Health. The death of Dr. Cabiadis occurred in the course of the autumn from fever contracted at Bussorah, to which town he had been despatched on the reappearance of plague in Mesopotamia in the present year.

WE desire to draw the attention of our readers to a notice which has appeared in our advertising columns. The surgeons of the Royal Westminster Ophthalmic Hospital will attend daily at 2 P.M. to give instruction in the use of the ophthalmoscope to practitioners. The ophthalmoscope is becoming of greater value every year both for the diagnosis of nerve and other tissues, and for the recognition and estimation of diseases of refraction, &c. The knowledge gained by its use should not be in the hands of specialists, and we hope this effort to disseminate it will be cordially responded to.

MR. PARDIE has lately been elected resident house-surgeon at the Gateshead Dispensary. This appointment has always been considered one of the best in the district for young practitioners, and has often proved a stepping-stone to good and general practice.

MR. ADAM MCCALL, the leader of the Livingstone Inland Mission on the river Congo, and the announcement of whose death was received a few days ago, was a distinguished student at the London Hospital before his departure from England two years since.

DR. VINCENT RICHARDS has, we understand, commenced a series of experiments to test the efficacy in cobra-poisoning of M. Lacerda's plan of injecting permanganate of potash into the cellular tissue—a plan to which we drew attention on Nov. 5th. Dr. Richards appears to be very hopeful of satisfactory results.

A MEETING of 250 physicians was held at Copenhagen, on November 28th, at which a resolution was adopted approving the proposal to hold the next International Medical Congress in 1884 at Copenhagen, and proffering a cordial welcome by the Danish medical profession to their brethren from foreign countries.

DR. SEDGWICK SAUNDERS has published a pamphlet "On the Action of Water upon Lead Pipes," which is in fact a translation from the French of M. Belgrand, preceded by certain introductory remarks by Dr. Saunders. The pamphlet will be read with much interest and some consolation by those who are interested in the subject.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Maidstone (*Small-pox*).—The medical officer of health for Maidstone, Mr. Matthew Algernon Adams, has presented to the local board of that town a special report on certain outbreaks of small-pox which took place in the town during the present year. The total number of cases which occurred amounted to 57, of which 5 died. The cases belonged to four several groups, 2 being unaccounted for, 6 imported, 15 occurring in connexion with the Militia Barracks, and almost certainly arising from the introduction of the contagion of the disease by a modified, and at the same time unrecognised, case; and the fourth and largest group, of 34 cases, being determined most probably by the dissemination of contagion by infected rags, during the process of rag-sorting in a paper mill. Several of the girls engaged in sorting were seized with the malady practically contemporaneously, and from them it spread to others. The only source of contagion which could be suggested for this common infection in the first instance, after careful inquiry, was that some infected materials had got among the rags in process of sorting, and had conveyed the contagion of small-pox to the sorters. This suggestion completely meets the facts of this particular group of cases, as related by Mr. Adams. The whole story forms a most interesting contribution to our knowledge of the subject. Mr. Adams studied the several cases of small-pox with reference to vaccination, with the result of adding another series of illustrations of the received results as to the protective influence of vaccination in small-pox. He adds to the interest of his observations on this part of the subject by graphically portraying the vaccination-marks in several cases. At the time of the outbreak Maidstone was ill supplied with infectious hospital accommodation, and had to provide supplementary means before it could efficiently deal with the outbreak. In fact, the sanitary authority was caught in the lurch by the outbreak, and although it eventually recovered itself, it did this at the cost of heavy and needless expense. Mr. Adams's summary of the teachings of the outbreak deserves to be reproduced. He writes:—"We must be prepared at any moment to deal with from twenty-five to thirty cases of small-pox spread broadcast through the town. That isolation in a suitable building has proved itself here, as everywhere, the best method of dealing with outbreaks of contagious disease. That our present hospital accommodation is utterly unsuited and inadequate for the purpose. That a temporary camp, if a costly expedient, has been found a serviceable makeshift; but that it is evident that such a camp could be available only during the warmer months of the year, so that, say from November to April, we are without that resource. That, at the best of times, temporary expedients have many drawbacks besides being mere makeshifts; they are costly and wasteful, and treacherously liable to break down, being extremely harassing to the medical officer and his colleagues at times when their minds and energies should be wholly given to their own proper duties. That it is a folly to allow the disinfecting apparatus to lie idle. That vaccination and revaccination are the true antidotes to small-pox has again been triumphantly demonstrated. That the Local Board is to be congratulated upon the course taken and pursued in dealing with the recent emergency, which has been proved to have been attended by the most conspicuous success, whereby the town was spared the development of two large and several minor simultaneous outbreaks of small-pox into an extensive and destructive epidemic."

Birmingham.—Dr. Alfred Hill reports for the quarter ending October 1st, births at the annual rate of 35·4 per 1000 population, and deaths at the annual rate of 18·47 per 1000. The deaths from diarrhœa fell to 210 during the quarter, as compared with 606 during the corresponding period of the previous year. "There can be little doubt," observes Dr. Hill, "that the main reason for this gratifying diminution in the mortality from the disease in question is to be found in the much lower temperature which prevailed in the months of August and September of this year than in the same months of 1880."

THE TAUNTON SANITARY HOSPITAL.

The Sanitary Hospital Committee of the Taunton Corporation have published their medical officer's (Dr. Alford's) report on the administration of the hospital during the year ending September, 1881. Within this period nineteen cases were admitted from the urban and rural sanitary districts, all of their own free will. Fourteen of the cases admitted were of scarlet fever, three of enteric fever, one of rubeola, and one of small-pox, eleven cases coming from the urban district and eight from the rural district. Of the result of the admissions Dr. Alford observes: "Not merely in all these cases has the disease been checked in its spread, but, moreover, the patients themselves have made infinitely better recoveries than they would had they remained in their own crowded dwellings, where good nursing and food, and a plentiful supply of pure air, and thorough ventilation, are sometimes unknown. One or two most desperate cases have recovered, which must have ended in death had they not been removed. As it was, not one case ended fatally, all recovering, and were free from those dangerous sequelæ which are apt to follow many of these diseases if care be not taken." The total working expenses of the hospital during the year was £239 8*s*. 2*d*., of which the sum of £24 10*s*. was received from paying patients. The general working of the hospital is satisfactory, and Dr. Alford states that the popular prejudice against going into a hospital is fast disappearing.

THE NOTIFICATION OF INFECTIOUS DISEASES, LIVERPOOL.

A deputation of members of the Medical Institution of Liverpool had an interview, on the 24th ult., with the Health Committee of the Corporation, at the Municipal Offices, on the proposed provisions relating to the notification of diseases, which the Corporation have intimated their intention to introduce into an amendment of the Local Sanitary Acts. The deputation consisted of Messrs. Reginald Harrison, Turnbull, Waters, Davidson, Carter, Caton, Edgar Brown, and Hall. Before the deputation was admitted a letter was read from the Registration of Diseases Committee of the British Medical Association, expressing surprise that the medical profession of Liverpool should have opposed the proposition of the Corporation for the establishment of a system of notification of infectious diseases in Liverpool. Mr. Carter was the spokesman of the deputation representing the local profession, and he took up a position which we confess not clearly to understand. He approved of the notification of infectious diseases as an abstract proposition, but he objected to any scheme which would include the medical profession in the mechanism of notification, although it is obvious that unless the notification is founded on medical evidence it must be valueless. He maintained, moreover, the extraordinary proposition that medical men, when called in to treat a disease which may happen to be infectious, adopted all the means that circumstances permitted to limit the spread of infection. While we are willing to believe that greater attention is being given by medical men to this important question, the cases must indeed be few in which they can carry

out the intention, however willing. In whatever concerns the condition of drains and the details of infection, in the vast majority of cases, unless the Sanitary Authority steps in and undertakes the responsibility, the medical man and the infected family are equally helpless. The relief to the private practitioner afforded by the ability to fall back, in questions of prevention, both as regards himself and his patients, upon the medical officer of health and the sanitary staff of the local authority, is indescribable; and to set aside such relief is voluntarily to refuse one of the most important adjuncts in dealing successfully with infectious diseases, especially among the poor and less well-to-do, that we possess. Mr. Carter was unfortunate in seeking an argument against notification in the experience of those towns which have already sought for and obtained powers of notification. The experience of which he spoke admits of a very different interpretation from that which he gave, and he was particularly unfortunate in referring to the case of Edinburgh. The deputation did not improve the position taken up by the Medical Institution of Liverpool, and they advanced no argument which ought to influence the Health Committee of the Liverpool Corporation. The subject in its practical bearings was clearly an unfamiliar one with the members of the deputation, and they were placed in a false position equally as to the facts and the policy of notification.

AN INDEPENDENT BOARD.

The Local Government Board having requested to be informed of the reasons which caused the guardians of the Battle Union to elect a gentleman to the post of medical officer to whom the Central Board had made an objection on the ground that he already held the appointment of sanitary inspector of the union, the Battle Board decided to close the subject by telling the higher authority that the medical officer was elected by a majority of the Board, and regretting that they could not give further reasons.

A meeting of the Kingston Rural Sanitary Authority took place recently, at which were present Mr. Henley, one of the general inspectors of the Local Government Board, and Dr. Thorne Thorne, of the Medical Department of that Board. The meeting was called to consider the question of the erection of an infectious disease hospital, but it was occupied chiefly in uttering fulminations against, and criticising certain proceedings of, the Local Government Board, with which the authority was dissatisfied. The meeting was adjourned, and the subject of the hospital postponed for further consideration.

The Skipton Local Board has forwarded to the Craven Combined Authority a recommendation that their medical officer be authorised to give a fee of 2*s.* 6*d.* to any medical practitioner who should report to him a case of infectious disease, and that a similar pecuniary acknowledgment be awarded to any other person who should confidentially report such a case to the medical officer where a doctor had not been called in.

The Port of London Sanitary Authority are taking proceedings to bring the state of pollution of the Thames within the influence of the metropolitan sewage outfalls under the attention of Parliament.

The Metropolitan Board of Works, it is announced, have decided to increase the sewage outfall works at Crossness and Barking at an estimated cost of £160,000.

An outbreak of scarlet fever is reported at Marlow.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty of the largest English towns 4828 births and 3161 deaths were registered during the week ending last Saturday. The annual death-rate in these towns, which had been equal to 22·4 and 20·5 per 1000 in the two preceding weeks, rose again to 21·7 last week. The lowest rates in these towns were 13·1 in Wolverhampton, 15·8 in Leeds, 16·4 in Bradford, and 16·8 in Newcastle-upon-Tyne; the rates in the other towns ranged upwards to 22·5 in Manchester, 27·0 in Salford, 28·2 in Liverpool, and 30·6 in Hull. The death-rate in these towns during the first eight weeks of the current quarter averaged 21·2, against 21·3 and 22·1 in the corresponding periods of 1879 and 1880. The deaths referred to the principal zymotic diseases in these towns were 514 last week, showing an increase of 42 upon the number in the previous week; they included 150 from scarlet fever, 118 from measles, 80 from whooping-cough, 75 from "fever" (principally enteric), 35 from diphtheria, 34 from diarrhœa, and 22 from small-pox. Scarlet fever showed the largest proportional fatality in Hull, Nottingham, and Brighton; 32 more fatal cases of this disease were recorded in Hull, making 502 that have occurred in that city since the beginning of July last. The highest death-rates from measles were returned in Liverpool and Manchester, and from "fever" in Bristol, Hull, and Brighton. The 35 deaths from diphtheria in the twenty towns included 26 in London and 5 in Portsmouth. Three more fatal cases of measles were recorded in the Manchester Workhouse at Crumpsall. Small-pox caused 23 more deaths in London and its suburbs, 1 in Brighton, and one in Newcastle-upon-Tyne; but no fatal case of this disease occurred in any of the eighteen other large provincial towns. The number of small-pox patients in the metropolitan asylum hospitals, which had been 440 and 452 on the two preceding Saturdays, further rose to 449 at the end of last week, including 98 in the Convalescent Hospital at Darenth. The new cases of small-pox admitted to these hospitals, which had been 76 and 77 in the two previous weeks, rose to 113 last week. The Highgate Small-pox Hospital contained 41 patients on Saturday last. The deaths referred to diseases of the respiratory organs in London, which had been 433 and 345 in the two preceding weeks, rose to 382 last week, but were again 104 below the corrected weekly average. The causes of 53 or 1·7 per cent. of the deaths in the twenty towns last week were not certified either by a registered medical practitioner or by a coroner. The proportion of uncertified deaths did not exceed 0·8 per cent. in London, but averaged 2·6 per cent. in the nineteen provincial towns. All the causes of death were duly certified in Brighton, Portsmouth, Plymouth, Bristol, Wolverhampton, Leicester, and Newcastle-upon-Tyne; whereas the proportions of uncertified deaths were largest in Sheffield and Oldham.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight Scotch towns, which had been equal to 22·9 and 22·3 per 1000 in the two preceding weeks, further declined to 20·3 in the week ending last Saturday, and was 1·4 below the average rate in the twenty large English towns. The deaths referred to the principal zymotic diseases in these Scotch towns, which had been 81 and 101 in the two previous weeks, declined again to 89 last week; of these, 19 resulted from diphtheria, 17 from scarlet fever, 15 from whooping-cough, 15 from diarrhœa, 13 from measles, 10 from "fever," and not one from small-pox. The annual death-rate from these zymotic diseases was equal to 3·8 per 1000 in the eight towns, and slightly exceeded the average rate from the same diseases in the twenty towns. The highest death-rate from these diseases occurred in Greenock and Glasgow. Diphtheria was the most fatal of these diseases in the Scotch towns last week; and the 19 deaths from this cause included 12 in Glasgow, 5 in Greenock, and 2 in Edinburgh. The 17 fatal cases of scarlet fever included 9 in Edinburgh, 5 in Glasgow, and 3 in Dundee. The whole of the 13 deaths from measles and 8 of the 15 from whooping-cough were returned in Glasgow. The 10 deaths referred to "fever" showed a further decline of 2 from those in recent weeks. The deaths attributed to acute diseases of the lungs (bronchitis, pneumonia, and pleurisy), which had been 134, 128, and 122 in the three preceding weeks, further declined to 92 last week, and were equal to an annual rate of 4·3 per 1000, against 4·7 from the same diseases in London.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had not exceeded 21·3 and 21·2 per 1000 in the two preceding weeks, rose to 29·1 last week. The deaths in the city showed an increase of 53 upon the number returned in the previous week; 7 were referred to measles, 5 to "fever," 5 to diarrhœa, 2 to scarlet fever, and one to whooping-cough. The annual death-rate from these zymotic diseases was equal to 3·0 per 1000, while the rate from the same diseases was 3·5 in London and 4·3

in Edinburgh. The 7 fatal cases of measles showed a further increase upon recent weekly numbers, as did the 5 deaths both from fever and diarrhœa. The death-rate from "fever" was more than double the average rate from the same causes in the twenty large English towns. The deaths both of infants and of elderly persons considerably exceeded the numbers returned in recent weeks.

WORKHOUSE MORTALITY STATISTICS.

As the Local Government Board embodies the Central authority both for public health and pauperism (we advisedly place public health in front of pauperism, although their relative importance appears to be differently regarded by the Board), we might fairly expect to find in the Board's annual reports some statistical information as to the health and mortality of the nearly 200,000 persons who are pretty constantly inmates of the various poor-law establishments, exclusive of county lunatic asylums. From a public health, and also from a poor-law point of view, the importance of such statistics could not well be over-estimated; but their value and importance are absolutely ignored in the voluminous annual reports of the Local Government Board. We know that the workhouse infirmary is not only the infirmary for in-door paupers, but that it is, in fact, the poor man's hospital. The last published annual report of the Registrar-General tells us that during the year 1879 no fewer than 35,180 deaths were recorded in workhouse establishments, equal to nearly 7 per cent. of the total deaths in England and Wales. It seems almost incredible that the central Poor-law authority should not provide itself with such uniform statistics of the vast aggregate workhouse population, part permanent and part floating, as would enable it to form a true estimate of the relative health condition of the various portions of this population, and thus to fulfil its grave responsibility as superintending guardian of the sick paupers. We have from time to time been enabled to publish statistics showing the high rate of mortality in workhouse schools, and have called attention to the surprising reduction in the mortality of the metropolitan pauper imbeciles, since their removal from the tender mercies of pauper nurses in the local workhouses to the special institutions at Leavesden and Caterham. Such statistics strongly emphasise the need for definite information regarding mortality in workhouse establishments, without further urging their value in a variety of directions to the Local Government Board in its dual capacity. We may note one recent example of the necessity for such statistics supplied by one of the Registrar-General's recent weekly returns, in which it was incidentally reported that ten out of the eleven fatal cases of measles registered in Manchester occurred in the Crumpsall workhouse. During the last fifteen years fatal epidemics of measles in this workhouse have been of frequent, almost annual occurrence. We may presume that this fatality, at any rate its constant recurrence, is exceptional, and if so, some local conditions must exist, which it is not unreasonable to think might be amenable to sanitary control. If such fatal outbreaks are usual in workhouses, the sooner the evil is recognised and attacked the better for the credit of the central authority.

IRISH CENSUS REPORTS, KILKENNY.

The statistics for the County and City of Kilkenny have now been issued by the Commissioners, and show that the population consists of 99,531 persons, being 9 per cent. less than in 1871. The number returned in 1881 as receiving relief was 3806, or 1 in every 26·2 of the population—viz., 2246 out-door relief, and 1560 located in poorhouses. The births amounted to 25,967, and the deaths to 21,364, which would leave a natural increase of 4603; but we learn that 9133 persons emigrated during the decade, showing a decrease of 4530 in the population. As the difference, however, in the population in 1871 and in the present year (109,379 and 99,531) amounts to 9848, the discrepancy is accounted for by the defective registration of deaths in the earlier years, and to some extent by the incomplete returns of emigrants, also by the fact that no record of migration from one part of Ireland to another is obtainable. With reference to the condition of elementary education, 46·8 per cent. could read and write, 15·5 could read only, leaving 37·7 illiterate.

HEALTH MATTERS GENERALLY AT HOME AND ABROAD.

SANITARY IMPROVEMENTS AT WESTON-SUPER-MARE.

Weston-super-Mare has long enjoyed high repute as a pleasant and healthy watering-place, its chief recommendation being its extensive sands, safe bathing shore, and delightful walks among the pines covering the slopes of hills immediately behind the town. Of late years, however, Weston has aspired to become something more than a mere watering-place, and since the trustees of the Piggott estate have wisely thrown open the base of the pine-clad Worle Hill, which forms such a prominent feature in Weston scenery, for building purposes on its sheltered and sunny slopes, the town may fairly lay claim to be classed as an important winter health resort. Indeed, the new villas along the South-road are most admirably situated for winter residences; facing directly south they are protected from northerly and easterly winds by the Worle Hill, which rises immediately behind them. Their basements are extremely dry, the foundations of the houses being dug out of the solid limestone rock. The climate is equable, with a mean winter temperature of 18° F. above that of London; it is only 2° lower than that of Torquay, whilst the air is decidedly more bracing and less humid than the latter place, and therefore suits a different class of invalids. The cases that derive especial benefit from Weston air are those resulting from impaired nutrition, such as the early stages of tubercular disease, chronic rheumatism, &c. The equable climate and extremely dry nature of the subsoil are also especially favourable to all disorders of a catarrhal character. With a view of keeping pace with the growing importance of the place as a health resort, the sanitary authority are spending £10,000 in perfecting the drainage of the town, and introducing the open system for all the town sewers. They have also constructed a commodious hospital for the reception and isolation of infectious cases. A scheme is under consideration for widening the present esplanade, and extending it considerably in length, making a marine drive of more than two miles. The town authorities would also act wisely if they brought Knightstone within the scope of the proposed improvement, and if they became the owners of the very excellent system of hot baths there established.

THE WATER-SUPPLY OF EXETER.

An inquiry has been held at Exeter by Mr. S. J. Smith, one of the engineering inspectors of the Local Government Board, into the water-supply of that town, from which it appears that even the water-supply of London, described as Professor Frankland is wont to describe it, must in comparison be regarded as an emblem of purity. The Exeter water-supply comes from a dirty source, is dirty to look at, is offensive equally to the smell and the palate, is reasonably suspected of being detrimental to the health, in more than one way, of consumers, and, in addition, has certain chromatic properties which must certainly be peculiar to it. Sometimes it assumes a pink aspect, sometimes a green one, at the same time becoming slimy, and sometimes a yellowish pea-soupy appearance. Mud forms only one portion of its constituents, for mussels, eels, small fish, and leeches are not unknown to it. Only one piece of evidence was offered as to the utility of this fluid, to wit, that the chemical master at the Grammar School found it useful for teaching his class experimentally what a water for domestic consumption ought not to be. The townspeople dread the water, and when possible avoid using it, preferring to run the less obvious risk and nauseousness of water taken from wells within the limits of the city. Nevertheless the Corporation are not going to give up a water-supply having so many special qualities without a struggle, and it has yet to be seen whether the report of the local Government Board will induce them to take a view of their water-supply more consistent with modern notions on the subject.

ENTERIC FEVER IN LONDON.

The following summary of cases of enteric fever treated during the last quarter at the London Fever Hospital, for which we are indebted to Dr. Tonge Smith, the resident medical officer, will be read with interest in connexion with the recent exceptional prevalence of the disease in the

metropolis:—Since August 1st, fifty-eight cases have been disposed of, with eight deaths, thus complicated: One by broncho-pneumonia, moribund on admission; not bathed. Two by perforative peritonitis; both mild cases; one bathed, and one not. Two by hæmorrhage; one bathed, and one not. One by hæmorrhage and broncho-pneumonia; bathed. One by splenification of lung, bronchial abscess; hæmorrhage (transfusion); irregularly bathed. One by profuse diarrhœa, and great abdominal distension; bathed. The chief complications have been: Pneumonia or severe bronchitis, ten cases; in five on admission. Hæmorrhage, eleven cases; two before admission; and in three others bathing had not been employed. A tendency to excessive diarrhœa and distressing vomiting existed in several cases. Delirium has not been at all marked, except in a few cases on admission. On the whole, cases have been rather severe, requiring the free use of stimulants. Cold bathing is systematically employed here in the majority of cases, including most of the more severe ones, the patient being dipped in water at 65° F. for five minutes.

CHOLERA.

The latest news from Mecca reports cholera declining there, but cases, it is stated, have occurred in Jeddah, the port for Mecca, and in Yembo, the port for Medinah. In the course of the week a telegram from Madrid, dated Nov. 24th, stated that an official telegram had been received there from Alexandria to the effect that cholera had appeared in that town. This statement has since been contradicted by a telegram direct from Alexandria. Malaga has placed Philadelphia in quarantine on account of a rumoured occurrence of cases of cholera there, and certain Northern Powers have followed the Spanish example.

PLAGUE.

A report gained currency during the week that plague had broken out in the district of Lazistan, on the south-eastern coast of the Black Sea, province of Armenia. One of the physicians attached to the Ottoman General Board of Health was despatched to the locality, and it is now reported, by telegram from Constantinople, dated Nov. 24th, that there is no foundation for the rumour of plague in Lazistan.

The *Berbice Asylum Journal*, in an article on "Sewage Removal for Tropical Towns," advocates a pail system on the Rochdale method for its adaptability to the conditions existing in British Guiana, and for its efficiency, simplicity, and economy.

THE DEANS OF THE PARIS FACULTY OF MEDICINE.

THE resignation by M. Vulpian of the post of Dean of the Paris Faculty of Medicine, in consequence of the appointment of M. Paul Bert to the Ministry of Public Education, has led to the publication, in *La France Médicale*, of an interesting sketch of the successive occupants of the post. Of these M. Vulpian was the twelfth. The first dean, Thouret, was appointed in 1794, on the organisation of the Ecoles de Santé, but he had the title of "Director" until the year 1808, when it was changed to that of "Dean," at the time that Napoleon created the "Imperial University," and the "School" became a "Faculty." Thouret bore the new title for two years only, dying in 1810 of a cerebral affection. Leroux des Tillets succeeded to the post. He was a coadjutor and afterwards successor of Corvisart in the chair of medicine, and continued in office until the Faculty was suppressed in 1822, but lived for ten years later, dying in 1832, at the age of eighty-two, of cholera. On the reorganisation of the School of Medicine in 1823, Beauvais, also professor of medicine, was made dean, but held the post only for seven years, until the revolution of July, 1830. He passed the last ten years of his life in destitution, and died in 1840. In August, 1830, the professors elected Antoine Dubois, a favourite teacher, who accepted the post unwillingly and held it for a year only. The manner of his resignation was dramatic. He asked Orfila one day to accompany him to the Minister of Public Instruction about an administrative matter. When admitted to an audience, he said, "Sir, I am old, and have little wish for the duties of administration. I beg you to accept my resignation. Permit me to present to you M. Orfila, and to ask for him the vacant post." Orfila was an energetic dean, but had a troubled reign. He succeeded, however, in rebuilding the Clinical Hospital, erecting new dissecting-rooms, establishing a botanical garden, a museum of pathological anatomy, and the museum of normal anatomy which is called after him, and to which he gave, in 1853, the sum of 121,000 francs. He died a year afterwards of pneumonia. Orfila did not continue in office until his death, for educational arrangements were again disturbed by the revolution of 1848, when the post passed to the eminent man who has just passed away, Bouillaud. He at once became unpopular, on account of very discourteous conduct to his predecessor regarding some expenditure the latter had incurred, and at the end of the same year resigned. Bérard occupied the office until three years later (1852); he left it for one of a more political character. Paul Dubois was dean from 1852 to 1862, when, by an arbitrary act of the Emperor, two new chairs were created, and the nominee to one of them, Rayer, was created dean. It was a purely political and unpopular appointment; after struggling through two years Rayer resigned in 1864, and was comforted by the Emperor with the Grand Cross of the Legion of Honour! The next occupant of the post, Tardieu, was little more fortunate than his predecessor. He was popular at the commencement; but some measures of discipline destroyed his popularity, and disorders among the students led to his resignation in 1866. Wurtz, who succeeded him, was popular and successful. He created a course of practical chemistry, founded a laboratory for the students, and obtained the creation of three new chairs. He resigned in 1875 in order to take the Professorship of Chemistry in the Faculty of Science. Even more brilliant has been the reign of his successor, M. Vulpian, under whose direction twenty laboratories have been opened, ancillary courses have been instituted, four new professorships have been created, the lying-in hospital has been reconstructed. From him the office now passes to Béclard.

THE SERVICES.

ARMY MEDICAL DEPARTMENT.—Surgeon-Major Edward Nicholson, from half-pay, to be Surgeon-Major; dated 1st November, 1881. Surgeon John Percival Hunt, M.D., retires on temporary half-pay; dated 30th November, 1881.

MADRAS MEDICAL DEPARTMENT.—Surgeon-Major John Houston, M.D., to be Brigade Surgeon.

ENGINEER VOLUNTEERS.—Surgeon M. Baines, M.D., 1st Middlesex Engineer Volunteers, is granted the rank of Honorary Surgeon-Major; dated July 1st, 1881.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Staff-Surgeon William Deacon Isaac has been placed on the retired list of his rank from the 7th ult. Surgeon William Henry Boland has been placed on the retired list of his rank from the 4th ult.

The following promotion has been made:—Staff-Surgeon Henry Ashlin Close to be Fleet-Surgeon in Her Majesty's Fleet, with seniority of 19th ult.

GLASGOW WESTERN INFIRMARY. — The annual meeting of the Glasgow Western Infirmary was held on Nov. 24th. In the report submitted by the secretary, it is stated that the number of patients treated during the year 1880-81 was 14,456 outdoor, and 2958 indoor. The number of deaths was 223, or 8·4 per cent. of all cases treated to a termination; deducting 32, the number of those who died within twenty-four hours after admission, the death-rate falls to 7·3 per cent.; and if also those cases dying within forty-eight hours, of which there were 10, be excluded, the death-rate is reduced to 6·9 per cent. Applying the whole ordinary expenditure to the indoor department, leaving out of consideration the outdoor department, the cost of which it is difficult to estimate, the cost of each bed fully occupied was £53 11*s.* 2*d.*, as against £55 3*s.* 5*d.* last year. The ordinary income for the year was £13,216 5*s.* 7*d.*, a sum raised entirely by voluntary contribution; the ordinary expenditure was £14,139 17*s.* 5*d.*, showing a deficiency of £923 11*s.* 10*d.* The deficiency is caused by the largely increased number of patients treated, several new wards, built with Mr. Freeland's legacy, having been opened in the course of the year.

Correspondence.

"Audi alteram partem."

THE BRIGHTON HEALTH CONGRESS.

To the Editor of THE LANCET.

SIR,—It is to be hoped some practical results will arise from this meeting, and that it will end in something more than the reading of elaborate papers, speeches, and talk. What the country requires is wise and more strict sanitary legislation—that is, giving increased and more arbitrary powers to local and sanitary authorities and their officers, in order to overhaul and inspect all new buildings, drains, &c., to enable them to suggest and carry out the best means of getting rid of refuse and sewage. I am glad to see the able veteran sanitary reformer, Edwin Chadwick, Esq., C.B., will take an active part in the proceedings of the Congress, and that Dr. B. W. Richardson, F.R.S., will officiate as its president; for he has long been a distinguished and most enthusiastic sanitary reformer. Dr. Richardson materially assisted in promoting the cause of sanitary reform in Leeds, when I induced him, at the suggestion of the late Professor Sharpey, to come here to advocate the establishment of sanitary associations some twelve years ago, after which meeting some of my professional brethren co-operated with me in giving sanitary lectures in different parts of the town. I trust I may without egotism state, that forty years ago I gave a course of popular lectures on Public Hygiene, and the Philosophy of Health, also (at the suggestion of my late esteemed friend and preceptor Professor Sharpey) on such subjects as the Atmosphere, Climate, Clothing, Food, Water, Habitations, Ventilation, the Functions of Respiration, and the Circulation of the Blood, &c. In so doing I was only following the examples set by Dr. Southwood Smith, in his admirable work on the Philosophy of Health, Dr. Hodgkinson, in his practical lectures to the working classes in London on Hygiene, Dr. Kilgour, Mr. Combe, Dr. Caldwick, and other distinguished American professors.

I may be allowed to add that these sanitary lectures were most popular, and were delivered in many towns in this large and populous county, and the example has been followed, in a limited degree, by many of my professional brethren. In particular I may name my friend Mr. T. P. Teale, who has taken up the subject most warmly, and who has exposed the dangers of defective drainage and inefficient ventilation. I venture to suggest that if medical officers of health, and professional lecturers of ability and practical knowledge, would consent to give sanitary lectures to our various public institutions, they would prove most acceptable and useful, and the progress of sanitary reform would be materially promoted. Being unable to attend the Brighton Congress, and joining in advocating one of the great practical questions of the day, I venture to communicate, through your pages, the remarks of an old sanitary reformer and author, one who ought to know, from experience, something about the physical condition of a manufacturing population, having inspected for Her Majesty's service above 35,000 recruits for the Line and Militia.

Trusting the Brighton Congress will prove a success, and bear good fruit,

I remain, Sir, your obedient servant,

J. INGHAM IKIN, J.P., F.R.C.S.,
Leeds, Nov. 28th, 1881. Surgeon-Major.

P.S.—It may not be inopportune to add that in Leeds a great deal of the refuse from ashpits, &c., is now consumed by a rapid and successful process of incineration, and a great portion of our sewage is clarified and purified by a process of precipitation and filtration. I forget whose particular process or patent is now in use, but a great many have been tried, and as the riparian owners below Leeds do not complain of the state of the river Aire, I presume the process has succeeded; for previous to the adoption of this process they obtained an injunction against the Leeds Corporation to compel it to remedy the nuisance of allowing the sewage of the town to run into the river. I am sorry to add, above Leeds towards Bradford, Keighley, and Skipton, the river continues to be more like ink than water. Referring also to this part of the West Riding, the river Calder, running from above Halifax, through Mirfield and Dewsbury to below Wakefield, is in as disgracefully unhealthy and loathsome a condition as the river Aire, and the beautiful river Wharfe receives the sewage of the town of Otley, but it is the only river in this part in which fish can live, and they are fast disappearing, especially trout.

EXHIBITION JUDGES.

To the Editor of THE LANCET.

SIR,—The letter of "Scrutator" merely with a *nom de plume* would not have induced us to reply had it not appeared in the pages of THE LANCET. So little knowledge is displayed of the labour and special experience required for judging the exhibits at a food exhibition, that we feel that we ought to disabuse the minds of those who possibly think with your correspondent that "great discontent and dissatisfaction" is the result of anything but a not unnatural disappointment of unsuccessful exhibitors. We join issue with "Scrutator" in his statements that "leading firms declined to put in an appearance this year," and that "for the same reason upwards of one hundred, or more than one-half, of the exhibitors of the first show, were conspicuous by their absence."

Several "leading firms" when applied to stated "that they had already obtained last year the best awards they could hope for," and they were therefore content to rest upon their laurels.

The catalogue of exhibitors for this year is amply sufficient to show that many of the first firms in the trade are conspicuously present, and when, according to our judgment, their exhibits have merited awards their names are also to be found in the list published.

We as analysts and special experts do not claim immunity from error, nor do we expect that others may not disagree with our judgment. Such as it was, we adhere to it in every respect, and the awards were made in consultation with our medical coadjutors, who devoted a great deal of time and critical acumen to this end. We, however, are alone aimed at by a nameless "Scrutator," when he declares that "it is worse than a crime for a man to adjudicate on articles the virtues (?) of which he has extolled only a few weeks previous to the opening of the exhibition."

The special qualification of analysts and experts as judges of food exhibitions depends upon their previous intimate knowledge of the articles likely to be shown. Between us we have previously tested and analysed more than two-thirds of the more prominent of the exhibits, most of them many times over. We have at various times judged similar exhibits for similar awards, and have been referred to by the judges appointed more than half a score times previous to the present year. Special knowledge so acquired is in our estimation our particular *locus standi*.

The positions we have severally occupied in relation to the framing of the Food and Drugs Act enable us to pass by without comment the sneer about men who should be "pre-eminently qualified for the duties they are expected to perform;" but we take exception to the inference that because we have previously reported favourably (?) or unfavourably on articles exhibited, that we have been biased, or that our fellow judges would join us in making any improper awards.

If "Scrutator" will mention the names of the "men whose opinions, notices, and awards are never questioned," and, still more, will have the courage to add his own name, together with all he "saw and heard" by which the complaints appeared to him to be "fully justified," he will probably raise a question which we can easily and distinctly answer. It must, however, be understood that the judges in giving their awards do not give their reasons, unless those awards are directly impugned on the grounds of ignorance or partiality by a person who is not afraid to sign his name.

It may be interesting, as showing the careful and complete method adopted in analysing and testing samples of more than 200 exhibits, to point out that several exhibitors were evidently unprepared for the searching investigations to which their articles were submitted. Otherwise we cannot account for finding a considerable quantity of carbonate of lime in many of the bottles supposed to contain pure aerated distilled water, heavy traces of salt in others, and uncombined phosphorus in one of the many tonic beverages. Preserved milk, stated to keep for a considerable period, turned out

coagulated and quite unfit for use. Many samples of various soups were rancid and decomposed. Some baking powders contained only ten per cent. of available carbonic acid, instead of the thirty per cent. they ought to yield; and machines were exhibited practically requiring so much power as to greatly detract from their usefulness. Notwithstanding these and many other drawbacks, of which onlookers are unaware, we report specially, "The exhibits of this year show in many respects a great improvement over those of last year."

We do not wish to drag a red herring across the scent which "Scrutator" thinks he has picked up, but among the few we are acquainted with, who have expressed disappointment at the awards, we may mention that a bronze medal has not satisfied the exhibitor of some very fine but not otherwise remarkable specimens of cured bloaters. In conclusion, permit us to quote a paragraph appearing in to-day's paper that "both judges and jurors are very fallible. Thus, in the year 1880, of the decisions of the five Equity Judges of England fifty-one were confirmed on appeal and fifty reversed." We hope that our awards, if all were appealed against, would not show anything like such a result.

We are faithfully yours,

H. C. BARTLETT.
G. W. WIGNER.

London, Nov. 29th, 1881.

PARADOXICAL TEMPERATURES.

To the Editor of THE LANCET.

SIR,—I was very glad to see the "other side" of the case I reported to the Clinical Society, and which appeared in your columns, so ably advocated by my friend Mr. Newnham. It is very true that some held an opposite opinion to that which I entertained as to the genuineness of the temperatures recorded; I only felt justified in giving the results of my own observations and the tests which I employed to ascertain, as far as I was able, the real condition of the body temperature. As far as they went, my observations and tests were entirely opposed to the veracity of the extraordinary temperatures. I was well aware that some held an opposite opinion, but I could not be responsible for the observations and conclusions of others in a case of such obscurity. There is one observation of Mr. Newnham's, however, which I learnt for the first time a few days before his letter appeared in your columns. It was that he had felt the skin of the patient painfully hot to the touch at the time when he obtained some high temperatures from her. I constantly pointed out to him and to all the clinical clerks whilst she was under observation, the absence of this tangible heat of skin, and no note of its existence appears in her report, either during the time Mr. Newnham was her clinical clerk, or at any other period. It is extremely unfortunate that this otherwise important piece of evidence should not have been recorded. Lest my judgment may be thought unfairly sceptical, I may perhaps be allowed to mention that Dr. Moxon, Dr. Taylor, and Dr. Goodhart were, as far as I know, the only members of our staff who had opportunities of examining the patient, and of making their own observations upon her, and they have all expressed to me, in conversation, their opinion that the temperatures recorded were not genuine.

One word as to unequal temperatures in various parts of the body. I suppose it is within the experience of most observers that considerable differences not unfrequently occur. Thus the difference between the mouth and rectal temperature is very variable; still more so the difference between the mouth and axilla, between which the difference of 1·5° is by no means uncommon; and after cold bathing, in fever cases, when the surface capillaries are much contracted, a difference of 3° and 4° is frequent. So also we know, from surface thermometry, that the temperature of different parts varies very considerably, even as the result of functional activity, and without the presence of inflammation. We have at present in Guy's a boy, under the care of Dr. Pye-Smith, with some obscure affection characterised by pyrexia and general hyperæsthesia, probably due to acute tuberculosis: the temperature in this case is very variable from hour to hour, and during much shorter intervals of time; and it also varies in the two axillæ, sometimes one sometimes the other being the highest; but the variation so far has never exceeded 0·8°. This has only occurred on one occasion, otherwise it has not exceeded 0·4°. There is a still greater variation between the mouth and axillæ; this has once reached 2°. This case is just such a one in which, if ever, paradoxical temperatures might occur, but I shall be much surprised if they do so, although they will be carefully watched for. The variations already discovered are interesting, but not by any means paradoxical, for they can often be seen in cases of hemiplegia and other states in which the condition of the vaso-motor nerves, and consequently the degree of contraction of the vessels, is found to be unequal in the two upper extremities by means of the sphygmograph. Such observations as these I have made on two or three occasions, and there is nothing in them that our knowledge of physiology cannot readily explain.

I am, Sir, yours faithfully,

Nov. 1880. F. A. MAHOMED.

A PIECE OF POTTERY TRAVELLING FROM ONE ARM TO THE OTHER.

To the Editor of THE LANCET.

SIR,—Thinking the following case might be of interest to your readers, I offer it for publication in your columns.

On Sept. 27th H. G——, aged fourteen, came to me for treatment, suffering from chronic debility, assigning as a reason the passage of a piece of pottery subcutaneously from one arm to the other. Upon examination I found a scar an inch or so above the right wrist, and a piece of hard substance, half an inch square, embedded in the left arm, about three inches above the olecranon. The patient's description was as follows. Whilst residing at Halifax, York, six years ago, and playing with other boys at a pottery, he fell over a polished pot ornament, a piece of which chipped off and penetrated the skin above the right wrist, making a large horse-shoe-shaped wound, which bled profusely, and was attended to and strapped by some female friend. The fragment then passed subcutaneously up the outer side of the right arm to the tip of the corresponding shoulder, where it could be distinctly felt, impeding in some measure the use of the arm, so much so that the boy could not write at school, and causing pain. It then crossed the lower part of the neck to the left coracoid process, then the inner side of the left arm, until it arrived at the junction of the middle and lower third, when it passed to the back of it; here I cut down upon and dissected it out. The silicates had quite disappeared, and nothing but a chalk-like mass, easily pulverised, was found, strongly adherent to surrounding tissues. The boy states he has never been well since the accident. I thought the case of sufficient interest to record, owing to the size of the body concerned, its shape, and the length and circuitous course it pursued in its travels.—Your obedient servant,

P. W. G. CANNING, L.R.C.P.E., &c.,
House-Surgeon, Hull Dispensary.

Nov. 1881.

THE PLUCK LIST OF THE EDINBURGH DOUBLE QUALIFICATION.

To the Editor of THE LANCET.

SIR,—There is a growing feeling among students here that the severe slaughter of the innocents at the recent examinations for the double qualification is in some way connected with the presence of the Royal Commission, and that as soon as that body is dissolved things will continue as of old and more peaceful times will return. The London, Irish, and provincial chronics have certainly had a scare, and not a few have determined to seek rest as unqualified assistants, and wait for smoother times. If the Commission does not depart soon, the result will be very disastrous; for it is not easy to win the confidence of birds after a blunderbuss has been fired off two or three times amongst them; and the Colleges depend greatly on foreign-grown material. The number of students studying in Edinburgh who take the licences of the Colleges, compared with those from other schools, is very small, and shows the appreciation in which the natives hold their gifts. But, Sir, a Royal Commission is not a cheap scarecrow; and the public should be protected against a return of the old times. We cannot keep a Royal Commission always on hand; and therefore the one-portal system seems the only safe remedy.

I am, Sir, your obedient servant,

November, 1881. COMMON SENSE.

SPREAD OF INFECTIOUS DISEASE BY MILK.

To the Editor of THE LANCET.

SIR,—I have pleasure in sending you a copy of a memorial sent to Mr. Dodson by the North-western Association of Medical Officers of Health.

I remain, Sir, yours faithfully,

Manchester, Nov. 26th, 1881. F. SCOTT.

To the Right Honourable J. G. Dodson, M.P., President of the Local Government Board.

The Memorial of the North-western Association of Medical Officers of Health respectfully sheweth:—That your memorialists are a body of medical officers of health practising in the counties of Lancaster, Chester, Derby, and the West Riding of the county of York. That your memorialists having evidence that certain epidemic diseases, as scarlatina and typhoid fever, are not infrequently spread by means of milk, and holding that certain epizootic diseases, as foot and mouth disease, may also be occasionally spread by means of milk, and believing that the powers local authorities already possess are inadequate to prevent the specific contamination of milk, or its sale when contaminated, would urge upon your honourable board the desirability of taking steps to provide local authorities with additional powers, that is to say:—1. To enable local authorities to require all licensed milksellers to notify all cases of infectious disease appearing on their premises, with ability to close their premises till the removal of the infected animal or person, and the disinfection of the premises. 2. To enable local authorities to veto the sale of milk by vendors coming from without such authorities' boundaries.

Your memorialists would also urge on your honourable board that local authorities should be notified by memoranda or otherwise, to put in force the powers they at present possess for the efficient inspection of milk, enjoining in particular:—1. That proper inspectors be appointed. 2. That the fixtures of premises proposed to be used for dairy purposes be referred to the local health officer to determine. 3. That the storing or selling of milk in general shops be prohibited. 4. That samples of milk be taken for analysis from time to time from all licensed vendors in a district, and not merely from those against whom specific complaints have been made.

Your memorialists therefore earnestly pray that these propositions of your memorialists may have your careful attention.

And your memorialists will ever pray, &c.

(Signed on behalf of the North-western Association of Medical Officers of Health),

G. A. KENYON, President.

Nov. 24th, 1881. FRANCIS VACHER, Hon. Sec.

Obituary.

RICHARD SWEETING, M.D.

IT is our sad duty to chronicle the death of this gentleman, which occurred on Oct. 13th at sea. Dr. Sweeting was born in the Bahamas in 1829, and began his professional education at the old Manchester Royal School of Medicine in Pine-street and the Royal Infirmary in 1849, being apprenticed to the late Dr. Close, a leading practitioner of that city. Here, under the able guidance and teaching of such men as Lund, Calvert, William Smith, Watts, and others, he achieved brilliant success, both in the class-room and the hospital wards, carrying off numerous medals and prizes, and evoking eulogiums from his teachers for his great industry and intelligence. The old system of apprenticeship then in vogue also enabled him to gain a thorough insight into the working of practice, and laid the foundation of his success in after-life. In 1854 he graduated at St. Andrews and obtained his College diploma, after which he practised for eight years at Nassau in the Bahamas. In 1862 he came to England, and after remaining about a year in Cambridgeshire proceeded to Stratford in Essex. In this part he practised with great success and credit for fourteen years, and possessed a large and busy connexion, being universally esteemed and respected. But, like many other members of our profession, hard work told eventually upon his health, and in 1877 he was induced to retire from active toil. He lived after this in Clapham-park, but was obliged every winter to pay frequent visits to health-resorts on the south coast. The winter of 1879–80, spent in America and the West Indies, so recruited his health that a long tenure of life was expected; but this proved delusive, as he died on his way to seek a similar escape from the trying climate of this country. Death occurred on board the Cunard steamer *Gallia*, five days after leaving Liverpool, the immediate cause being uræmia and failure of heart. As a practitioner, Dr. Sweeting was distinguished as an accurate diagnostician and accomplished accoucheur, and displayed great originality and resource in the treatment of children; he also contrived to find time, amidst the cares of a heavy practice, to contribute papers on leprosy in the West Indies, scarlatina, and cancer of the breast to the medical journals, and latterly was much interested in the question of the treatment of tetanus and hydrophobia, advocating the employment of copious venesection. He married in 1855 the daughter of the late Dr. Deane of St. Ives, by whom he leaves issue, two sons (one of them in the profession) and a daughter.

JACOB SANDERSON DENHAM, M.D. GLASG., &c., SOUTH SHIELDS.

WE lately recorded the death of a medical man at Tynemouth, who had creditably impressed his individuality on two or three generations. We have now the painful duty of chronicling the death of a member of the profession on the south side of the mouth of the Tyne, who, though not much known beyond his native town, was well known there, and will be greatly missed. Dr. Denham, walking or, still more, riding, was a familiar figure. He was very attentive to his professional duties, which included those of many public appointments. He was medical officer of the Westoe district of the South Shields Union and of the workhouse, surgeon to the Ingham Infirmary and South Shields and Westoe Dispensary, certifying factory surgeon, medical inspector of seamen for South Shields, and assistant-surgeon to the 6th Durham Royal Volunteers. He was an excellent practitioner, and his assistance in medical, surgical, or obstetric cases was often sought by, and always cheerfully given to, his medical brethren. Dr. Denham took the membership of the College of Surgeons of England in 1847, and under this diploma held Poor-law appointments. It is to his credit that twenty years later he took the degree of the University of Glasgow. Though Dr. Denham was remarkable for attention to his patients, even the poorest, and for a keen human interest in men "of all sorts and conditions," he also found time for active work in connexion with Freemasonry and with the Conservative party, of which he was a consistent member. Though Dr. Denham's death from apoplexy occurred at the comparatively early age of sixty-one, his rather feeble organisation made the attainment of that age somewhat remarkable.

E. A. H. HEAD, M.B., M.R.C.P. LOND., &c.

THIS accomplished physician, who died at the residence of his brother, the Rectory, Teignyrace, Devonshire, aged fifty-two, was of a most retiring disposition and much esteemed by his friends. He was a Devonian by birth and naturally not very robust. He received his medical education at King's College, where he took the highest honours. For several years he was in general practice in St. John's Wood, and held the appointment of District Medical Officer for Lisson-grove. In 1861 he moved to Harley-street (having sold his practice), where he practised most successfully as physician-accoucheur, and was conjoint lecturer on Midwifery and Diseases of Women and Children with the late Dr. Ramsbotham, at the London Hospital, at whose death he succeeded to the full lectureship. Through failing health, he was compelled to resign his appointment and to relinquish practice. Of late years he had held the appointment of inspector of factories for the City of London.

PRESENTATION.—On Monday last, Mr. Alex. Fraser, M.B., the Assistant Lecturer on Anatomy at the Medical School, Owens College, Manchester, was presented by the students with an illuminated address and microscope, in appreciation of the efforts and zeal which Mr. Fraser had shown during the time of his connexion with the school in aiding the students in their anatomical studies. The microscope is a magnificent instrument, by Zeiss, of Jena. Its value is about £35; and a plate bears the following inscription: "Presented to Alex. Fraser, Esq., M.B., by the students of the Owens College Medical School, November, 1881."

LADY DE TABLEY laid the foundation stone of a new hospital in connexion with the Knutsford Workhouse on the 23rd ult. The new building, which is to cost about £7000, is to be erected from the designs of Messrs. Tate and Popplewell of Manchester.

Medical News.

UNIVERSITY OF LONDON. — The following candidates have passed the recent M.B. Examination :—

FIRST DIVISION.

Atmaram, Anundrao, B.Sc., University College.
Ballance, Charles Alfred, St. Thomas's Hospital.
Barron, Alexander, Liverpool Royal Infirmary.
Bassett, Henry Thurstan, Guy's Hospital.
Bredin, Richard, Liverpool Roy. Infirmary and Guy's Hosp.
Chisholm, William, B.A. Sydney, University College.
Clark, Charles Alfred Dagnall, St. Bartholomew's Hospital.
Clarke, Ernest, St. Bartholomew's Hospital.
Collier, Mark Purcell Mayo, St. Thomas's Hospital.
Collins, William Job, B.Sc., St. Bartholomew's Hospital.
Davies, David Samuel, St. Thomas's Hospital.
Dickinson, Thomas Vincent, St. George's Hospital.
Griffiths, Philip Rhys, University College.
Harper, James, St. Bartholomew's Hospital.
Heath, William Lenton, St. Bartholomew's Hospital.
Hodgson, John, Manchester Royal Infirmary.
Horsley, Victor Alexander Haden, University College.
Lane, William Arbuthnot, Guy's Hospital.
Maguire, Robert, Manchester Royal Infirmary.
Mandsley, Henry, University College.
Mott, Frederick Walker, University College.
Rake, Beaven Neave, Guy's Hospital.
Rice, Bernard, St. Bartholomew's Hospital.
Routh, Amand Jules M'Connel, University College.
Salter, John Reynolds, University College.
Savill, Thomas Dixon, St. Thomas's Hospital.
Sawtell, Tom Henry, St. Bartholomew's Hospital.
Squire, John Edward, University College.
Stonham, Thomas George, London Hospital.
Walters, Frederick Rufenacht, St. Thomas's Hospital.

SECOND DIVISION.

Atkinson, John Mitford, London Hospital.
Chaffey, Wayland Charles, St. Bartholomew's Hospital.
Crisp, Thomas, St. Thomas's Hospital.
Davidson, John, King's College.
Drysdale, Alfred Edgar, University College.
Hall, Ben, St. Bartholomew's Hospital.
Hoole, Henry, Charing-cross Hospital.
Laurent, Eugène Arthur, University College.
MacDonald, Greville Matheson, King's College.
Marsh, George Ryding, Guy's Hospital.
Sanders, Charles, St. Bartholomew's Hospital.
Silk, John Frederick William, King's College.
Smith, Henry, St. Bartholomew's Hospital.
Smith, John, Guy's Hospital.
Sutton, Samuel Walter, St. Thomas's Hospital.
Swale, Harold, St. Thomas's Hospital.
Sykes, William Ainley, St. Bartholomew's Hospital.
Tait, Edward Sabine, St. Bartholomew's Hospital.
Thomas, Walter Duncan, St. Bartholomew's Hospital.

PROFESSOR HAECKEL is reported to be engaged in making scientific researches in Ceylon.

A MAN in his 102nd year is reported to have been operated on successfully for cataract at Vienna.

THE PRINCESS CHRISTIAN has consented to patronise a concert to be given in aid of a project to establish a cottage hospital at Staines.

THE Prince of Wales has signified his intention of presiding at the anniversary festival to be held in aid of the Victoria Hospital for Children in the coming year.

SUPERANNUATION ALLOWANCES. — Dr. Charles Mott, medical officer and public vaccinator for the Walton district of the Chertsey Union, has been granted a superannuation allowance of £50 per annum. — Mr. John E. Smyth, late medical officer for the third district of the Lambeth Union, has received a superannuation of £51 a year.

VACCINATION GRANTS.—The following gentlemen have obtained the Government grant for efficient vaccination in their respective districts :—Mr. Francis Wm. Butler, Newhaven Union (second time); Mr. Philip Edward Hill, Crickhowell Union (third time); Mr. W. Ernest Good, Dorchester Union; Mr. Horace Nutt, Sherborne Union (third time); and Dr. Forsyth, Birstal.

THE HOWARD MEDAL OF 1881.—This medal, of the value of £20, offered by the Statistical Society for the best essay on Gaol Fever, has been awarded to Frederick Pollard, M.D. Lond., M.R.C.S., of Liverpool. Dr. Pollard was Chiselden gold medalist and senior prizeman of St. Thomas's Hospital in 1868. The prize subject for the Howard Medal for 1882 is "On the State of the Prisons of England and Wales in the eighteenth century, and its influence on the severity and spread of small-pox among the English population at that period." The essays to be delivered on or before June 30th next.

ROYAL COLLEGE OF SURGEONS.—The half-yearly pass examination for the diploma of Fellowship of this institution was brought to a close on Monday last, when out of the twenty-five candidates who were examined no less than seventeen failed to acquit themselves to the satisfaction of the Court of Examiners, and were consequently referred to further professional studies for one year.

AT a public meeting held last week at the Town Hall, Salford, a committee was appointed to make arrangements for a public appeal on behalf of the Salford and Pendleton Royal Hospital, the funds of which, it appears, are in such a condition as to cause great anxiety to the authorities of the charity. During the last seven years the income had been £21,866 and the expenditure in the same period £24,156.

THE Gilbert Blane Gold Medal has just been awarded, on the recommendation of the Director-General of the Medical Department of the Royal Navy, and of the Presidents respectively of the Royal Colleges of Physicians and Surgeons, to the following medical officers—viz. : Fleet-Surgeon Belgrave Ninnis, M.D. St. Andrews, M.R.C.S., of H.M.S. *Garnet;* and Staff-Surgeon Alexander M'Donald, M.D. and L.R.C.S. Edin., of H.M.S. *London.*

ST. JOHN AMBULANCE ASSOCIATION. — Arrangements are being made by the committee with several of the leading railway companies for the formation of "railway centres," which will be managed by small local committees at the respective London termini, classes being held at the country and other stations as opportunities occur. A meeting to inaugurate the formation of such classes in connexion with the Great Northern Railway was held last week at the King's-cross Hall. Classes will shortly be opened at Westminster School and the City of London College.

CORONERS' ACCOUNTS.—The following were the disbursements of the several coroners of the county of Middlesex, as reported by the Committee for Accounts and General Purposes at the November Sessions :—Sir John Humphreys, Eastern district, 177 inquests from the 1st of October to the 11th of November, £293 5*s.*; Dr. G. Danford Thomas, Central district, 182 inquests from the 3rd of October to the 11th of November, £362 16*s.* 6*d.*; Dr. Diplock, Western district, 68 inquests from the 3rd of October to the 11th of November, £128 3*s.*; Mr. St. Clare Bedford, City and Liberty of Westminster, 45 inquests from the 3rd to the 31st of October, £89 12*s.* 6*d.*

BOOKS ETC. RECEIVED.

BLACK, A. & C., Edinburgh.
South of France, East Half. By C. B. Black. Third Edition. pp. 196. With 9 Maps and 14 Plans.

BOGUE, D., London.
A Pocket Guide to British Ferns. By Marian S. Ridley. pp. 96.

CHATTO & WINDUS, London.
Convalescent Cookery: a Family Handbook. By Catherine Ryan. pp. 150.

CHURCHILL, J. & A., London.
Eczema and its Management. By L. Duncan Bulkley, M.D. pp. 344.
The Prevention of Stricture and of Prostatic Obstruction. By Reginald Harrison, F.R.C.S. pp. 28.

CLARENDON PRESS, Oxford.
Tables of Qualitative Analysis. Arranged by H. G. Madan, M.A., F.C.S.

FLEET PRINTING WORKS, London.
Monaco, the Beauty-Spot of the Riviera. By Dr. T. H. Pickering. pp. 158. With Illustrations.

JOHNSTON, W. & A. K., Edinburgh and London.
The Statistical Atlas of England, Scotland, and Ireland. Edited by G. P. Bevan, F.S.S., F.G.S., &c. Part XI. : Sanitary.

KNIGHT & Co., London.
A Practical Guide for Inspectors of Nuisances. By F. R. Wilson. pp. 149.

LONGMANS, GREEN, & Co., London.
Transactions of the Clinical Society of London. Vol. XIV. pp. 290. With Illustrations.

MACMILLAN & BOWES, Cambridge.
Galeni Pergamensis de Temporamentis et de Inæqvali Intemperie Libra tres Thoma Linacro Anglo interprete.

OLIVER & BOYD, Edinburgh.
The Transactions of the Edinburgh Obstetrical Society. Vol. VI. pp. 231.

PAUL (KEGAN) & Co., London.
The Brain and its Functions. By Dr. J. Luys. pp. 327. With Illustrations.

PETTITT, T. & Co., London.
Concrete Buildings for Landed Estates in Great Britain and Ireland. By John Birch, Architect. pp. 30. With 15 Plates.

SCHAUENBURG, M., Lahr.
Entwickelungsgeschichte und Parasitismus der Menschlichen Cestoden. Von Sigmund Theodor Stein. Mit 79 Text-illustrationen und 14 Phototypischen.

SMITH, ELDER, & Co., London.
An Index of Surgery. By C. B. Keetley, F.R.C.S. pp. 428.
On Chorea, and other Allied Movement Disorders of Early Life. By Octavius Sturges, M.D. pp. 198.
Outlines of Naval Hygiene. By J. D. Macdonald, M.D., F.R.S. pp. 364. With Illustrations.

STOCK, ELLIOT, London.
On Consumption of the Lungs, or Decline, and its Successful Treatment. By G. T. Congreve. pp. 139.

STRAHAN & Co., London.
Lawn Tennis, its Players, and how to Play. By Lieut.-Col. R. D. Osborn. pp. 63.

VOGEL, F. C. W., Leipzig.
Handbuch der Allgemeinen Therapie Herausgegeben von Dr. H. v. Ziemssen. Zweiter Band, erster Theil.

WOOD, W., & Co., New York. TRÜBNER & Co., London.
Cutaneous and Venereal Memoranda. By H. G. Piffard, A.M., M.D., and G. H. Fox, A.M., M.D. Second Edition. pp. 309.
Ophthalmic and Otic Memoranda. By D. B. St. John Roosa, M.D., and E. T. Ely, M.D. Revised Edition. pp. 298.

Fraser's Magazine, Nov. (Longmans.)—Good Words, Nov., Good Cheer (Christmas Number); Little Snow Flakes; Sunday Magazine, Nov. (Isbister and Co.)—Historical and Biographical Sketches of Cotting and Wellington. (Boston Obstetrical Society).—The Ophthalmic Review, Nov.—Revue Militaire de Médecine et de Chirurgie, Oct.—Sclerosis of the Nervous Centres, mainly Cerebral; by A. Harbinson, M.D., M.R.C.S.—Summary of 56 Cases of Poisoning by Carbolic Acid, with a Study of its Physiological Action; by Dr. E. T. Reichert.—A Table of the Urine in Disease; by William Carter, M.D.—Popular Science Monthly.—Alcohol, its Nature and Action; by Dr. Philip Foster.—Archives de Neurologie, Oct.—Clinical Lecture on the Diagnosis of Abscess of the Liver; by M. C. Furnell, M.D., F.R.C.S.—Emetine et Atropine: Etude expérimentale; par Prof. Grasset et A. Amblard.—Description of the Chemical Laboratories at the Owens College; by H. E. Roscoe, B.A., F.R.S.—On Typhus Exanthematicus; af Dr. F. W. Warfvinge.—The Influence of Barometric Changes upon the Body in Health and Disease; by Dr. Andrew H. Smith, New York.—Etude du Processus Histologique des Néphrites; par le Dr. Ch. Hortolès. (Paris, Baillière et Fils.)—Diphtheria, its Cause, Cure, and how to Arrest it; by Robert Bell, M.D. (Blackie and Son.)—Antiseptic Surgery; by Dr. G. E. Fenwick.—A Refutation of Malthusian Arguments; by Dr. F. P. Atkinson; Remarks upon Clinical Phases of Poisoning by Alcohol; by Dr. F. Woodbury.—Index Medicus, Vol. III., No. 10.—Die Wanderniere der Frauen; von Dr. Leopold Landau. (Hirschwald, Berlin.)—The Monthly Military Budget. (Clowes, London.)—The Curability of Uterine Displacements; by Dr. P. F. Mundé.—The Scientific Roll—Climate.—Excision of the Tongue; by Walter Whitehead.—Middlesex Hospital Reports for 1879.—Les Eaux du Lac de Derkos et la Société Impériale de Médecine de Constantinople.—Eastbourne as a Winter Resort; by Dr. H. D. Ellis.—The Communicability to Man of Diseases from Animals used as Food; by Dr. H. Behrend.—On the Action of Water upon Lead Pipes; translation from the French of M. Belgrand; with Introductory Remarks by Dr. Sedgwick Saunders.—Bacon, not Shakespeare; by W. T.—Blackwood's Shilling Scribbling Diary for 1882.—Transactions of the Medical and Chirurgical Faculty of the State of Maryland.—Visible Muscular Conditions as Expressive of States of the Brain and Nerve-centres; by Dr. F. Warner.—Medical Reports of the Imperial Maritime Customs, China.—The Journal of Science, December.—The Leisure Hour, the Girl's Own Paper, the Sunday Magazine, December.—Caso di Tumore Tubercolare della Midolla Allungata; pel Prof. Francesco Orsi.—Hardwicke's Science Gossip, December.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest.*

BUCKLEY, H. CHILD, M.D., C.M.Aberd., M.R.C.S., has been reappointed Medical Officer of Health for the Llanelly Urban Sanitary District.

CORBOULD, HENRY FRANCIS, L.R.C.P.Lond., M.R.C.S., has been appointed Resident Obstetrical Officer to Charing-cross Hospital, vice F. J. Grindon.

CRANE, CHARLES R., M.R.C.S., L.S.A.Lond., has been appointed Resident Surgical Officer to Charing-cross Hospital, vice F. E. Taylor.

DUNCAN, W. A., M.D., L.R.C.P., M.R.C.S., L.S.A.Lond., has been appointed Resident Accoucheur to St. Thomas's Hospital.

HAYNES, SYDNEY W., M.B., C.M.Ed., has been appointed House-Surgeon to the Birmingham General Dispensary, vice C. J. Lewis, resigned.

HUGHES, J. EVAN, M.B., C.M.Glas., has been reappointed Medical Officer of Health for the Aberystwith Rural Sanitary District.

JONES, MORRIS, L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., has been re-appointed Medical Officer of Health for the Aberystwith Rural Sanitary District.

LYSTER, C. R. C., M.R.C.S., has been appointed Resident Medical Officer to Charing-cross Hospital, vice J. B. Baker.

OLDMAN, JOHN, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Huntingdon Urban Sanitary District.

PITTARD, M., M.R.C.S.E., has been appointed Assistant Surgical Officer to Charing-cross Hospital, vice H. R. Mosse.

REDWOOD, THOS., Ph.D., F.C.S., has been reappointed Public Analyst for the County of Middlesex.

SAUNDERS, HERBERT J., M.D., M.R.C.S., has been appointed Professor of Sanitary Science in the Royal College of Physicians and Surgeons, Kingston, Ontario.

STODDART, Mr. F. W., has been reappointed Public Analyst for the Borough of Bridgwater.

SUTTON, S. W., M.B.Lond., L.R.C.P., M.R.C.S., has been appointed Senior Assistant House-Physician to St. Thomas's Hospital.

TIBBLES, WILLIAM, L.R.C.P., L.M., L.S.A.Lond., has been appointed Medical Officer of Health to the Rural Sanitary Authority of Melton Mowbray Union. Also Medical Officer to Holwell Iron Company, Asfordby Works.

TRAVERS, OTHO R., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of the St. Leonards Branch of the St. Leonards Provident Dispensary, vice Heath, resigned.

WELLS, A. E., L.R.C.P., M.R.C.S., has been appointed Junior Assistant House-Physician to St. Thomas's Hospital.

WHITE, E. F., M.R.C.S., L.S.A.Lond., has been appointed Assistant House-Surgeon to St. Thomas's Hospital

WIGAN, C. A., L.S.A.Lond., has been appointed Assistant Medical Officer to Charing-cross Hospital, vice C. R. C. Lyster.

WILLIAMS, RICHARD, L.K.Q.C.P.I., M.R.C.S., has been appointed Honorary Consulting Surgeon to the Wrexham Infirmary, vice J. L. Williams, resigned.

Births, Marriages, and Deaths.

BIRTHS.

DRUMMOND.—On the 18th ult., at Piazza di Spagna, Rome, the wife of Edward Drummond, M.D., of a daughter.

HOLLIS.—On the 23rd ult., at Park Gate, Brighton, the wife of W. A. Hollis, M.D., of a son.

MACSWINNEY.—On the 23rd ult., at Westall House, Brook-green, W., the wife of G. H. MacSwinney, M.D., of a daughter.

PERIGAL.—On the 29th ult., at New Barnet, Herts, the wife of Arthur Perigal, M.D., of a daughter.

ROSS.—On the 14th ult., at Whiteparish, Wilts, the wife of R. Alexander Ross, M.R.C.S.E., L.S.A.Lond., of a daughter.

SAWTELL.—On the 7th ult., at Florence-road, Stroud-green, N., the wife of Tom Henry Sawtell, M.B.Lond., L.R.C.P., of a son.

MARRIAGES.

CORBETT—LEFROY.—On the 19th ult., at St. Marylebone, Danl. Corbett, jun., B.A.T.C.D., L.R.C.S.I., son of Danl. Corbett, M.R.C.S.E., of Clare-street, Dublin, to Louisa Florence, widow of Edward T. Lefroy, Esq., daughter of Maurice Brooks, M.P., of York-terrace, Regent's-park, London, and Sackville-place, Dublin.

DENNE—WEIGHELL.—On the 24th ult., at the Parish Church, Hove, Sussex, by the Rev. W. B. Weighell, B.A., brother of the bride, assisted by the Rev. T. Pescey, M.A., Vicar of Hove, Thomas Vincent de Denne, M.R.C.S., of Cradley-heath, Staffordshire, youngest son of William Denne, F.R.C.S., of Eastbourne, to Margaret Anne, third daughter of the late Rev. John Weighell, B.A., Rector of Cheddington, Bucks.

MITCHELL—MILLER.—On the 17th ult., at the Presbyterian Church, Galway, Robert Mitchell, M.D., of Nelson, Lancashire, to Agnes Halleburton, eldest daughter of John Miller, J.P., of Weir House, Galway.

ROBERTSON—MORRALL.—On the 24th ult., at Dudleston Church, Shropshire, by the Rev. Canon Lewis, Rector of Dolgelly, brother-in-law of the bride, assisted by the Rev. F. Alderson, incumbent of the parish, W. H. Robertson, Esq., M.D., F.R.C.P., J.P., of Buxton, Derbyshire, to Margaret, second surviving daughter of the Rev. Cyrus Morrall, of Plas Yolyn, Shropshire.

WHITLEY—NORRINGTON.—At the Parish Church of Illogan on the 26th ult., by the Rev. W. Oxland, R.N., Chaplain of H.M.S. *Duncan*, brother of the bride, assisted by the Rev. D. G. Whitley, brother of the bridegroom, F. G. H. Whitley, Surgeon, of St. Agnes, to Kate Norrington, widow of the late C. H. Norrington, Esq., of Plymouth.

DEATHS.

BLAKE.—On the 24th ult., at Bishopstone, Mossley, the residence of his son, G. F. Blake, Valentine Walshman Blake, F.R.C.S.Lond., late of Old-square, Birmingham, in his 64th year.

CHEESBROUGH.—On the 20th ult., at Blackburn, Henry A. Cheesbrough, M.D., Consulting Physician to the East Lancashire Infirmary, aged 44.

DAVIS.—On the 23rd ult., at Duffryn Ffrwd, Mountain Ash, Edward William Stephen Davis, M.R.C.S., &c., aged 63.

GREEN.—On the 29th ult., at the Borough Lunatic Asylum, Birmingham, Thomas Green, M.R.C.S., L.S.A.Lond., aged 81.

HAYNE.—On the 19th ult., at The Hill, Northdeet, Frederick Greaves Hayne, M.R.C.S.E., eldest surviving son of the late Rev. Thomas Hayne, Incumbent of Rastrick, Yorkshire, in his 90th year.

JOHNSTON.—On the 29th ult., at his residence, Hoskisson-street, Liverpool, John Johnston, M.R.C.S.E., &c., aged 80.

MILLER.—On the 28th ult., at Camberwell New-road, Dr. David Graham Miller, Fleet Surgeon, R.N., in his 81st year.

PHILLIMORE.—At Snenton County Asylum, Nottingham, William Phillimore, M.B.Lond., aged 60.

POLLOCK.—On the 20th ult., at Rose Hill, Hornsey, Timothy Pollock, M.D., late of Hatton-garden, aged 83.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

CONTRIBUTORS FOR 1882.

FIRST LIST.

THE following Physicians and Surgeons holding Honorary Hospital Appointments, Principal Medical Officers in the establishments of the Army and Navy, and Medical Officers of Health, have intimated their intention of contributing to the columns of THE LANCET during the year 1882. In addition to the provision thus made, we have arranged for the publication of many special Lectures.

ABBOTT, G., L.R.C.P. Lond., M.R.C.S. Eng., Surgeon to the Central London Ophthalmic Hospital, and to the Tunbridge Wells Eye, Ear, and Throat Dispensary.

ABLETT, E., M.D. St. And., Honorary Surgeon to the Whitehaven and Cumberland Infirmary.

ADAM, A. MERCER, M.D., L.R.C.S. Edin., Medical Officer of the Boston Cottage Hospital.

ALDRICH, PELHAM, M.R.C.S. Eng., Medical Officer to the First District and Workhouse, Mildenhall Union.

ALEXANDER, R. GERVASE, M.B. Edin., Senior Physician to the Bradford Infirmary and to the New Fever Hospital.

ALEXANDER, W., M.D. Edin., Senior Physician to the Halifax Infirmary.

ALFORD, F., L.R.C.P. Lond., Surgeon to the Haverstock-hill and Malden-road Dispensaries.

ALLCHIN, W. H., M.B. Lond., M.R.C.S. Eng., Physician to the Westminster Hospital, Lecturer on Physiology and Pathology to the Westminster Hospital Medical School.

ANDERSON, J. W., M.B., Ulverston.

ANDERSON, W., L.R.C.P. Lond., F.R.C.S. (Exam.), Assistant-Surgeon to St. Thomas's Hospital.

ANNANDALE, T., F.R.C.S. Ed., M.R.C.S. Eng., Surgeon to the Edinburgh Royal Infirmary; Regius Professor of Clinical Surgery at the University of Edinburgh.

ANNINGSON, B., M.D., M.R.C.S. Eng., Examiner for the 1st M.B. and Special B.A. and Higher Local Examinations at the University of Cambridge, Surgeon to the Cambridge University Rifle Volunteers.

APPLEYARD, J., M.B. Lond., F.R.C.S. Eng., Assistant-Surgeon to the Bradford Eye and Ear Infirmary.

ARNISON, W. C., M.D. Durh., M.R.C.S. Eng., Joint Lecturer on the Principles and Practice of Surgery to the University College of Medicine; Senior Surgeon to the Newcastle Infirmary.

ASH, T. L., M.R.C.S. Eng., Medical Officer of Health to the Holsworthy and Okehampton Unions.

ASHBY, H., M.D. Lond., Physician to the Manchester General Hospital for Children; Evening Lecturer on Animal Physiology at Owens College.

ASHMEAD, G., L.R.C.P. Ed., L.R.C.S. Ed., Lecturer on Natural Science under the Science and Art Department of the Committee of Council on Education; Surgeon to the Brierly-hill Police.

BABER, E. CRESSWELL, M.B. Lond., Honorary Surgeon to the Brighton, Hove, and Sussex Throat and Ear Dispensary.

BADER, C., M.R.C.S. Eng., Ophthalmic Surgeon and Lecturer on Diseases of the Eye at Guy's Hospital.

BAKER, W. MORRANT, F.R.C.S. Eng., Assistant-Surgeon to, and Lecturer on Physiology at, St. Bartholomew's Hospital; Senior Surgeon to the Evelina Hospital for Sick Children.

BARKER, A. E., F.R.C.S.I., Assistant-Surgeon to University College Hospital, and Assistant Professor of Clinical Surgery and Teacher of Practical Pathology at University College, London.

BARNES, EDGAR G., M.D. Lond., Medical Officer of Health to the Eye Union and Hartismere Rural Districts.

BARR, J., M.B. Glasg., L.R.C.S. Edin., Visiting Surgeon to Her Majesty's Prison, Kirkdale; Physician to the Stanley Hospital.

BARRATT, J. G., M.D. St. And., F.R.C.S. Eng. (Exam.), Physician to the Margaret-street Infirmary for Consumption.

BARRS, A. G., M.B. Edin., M.R.C.S. Eng., General Infirmary, Leeds.

BARTLEET, T. HERON, M.B. Lond., F.R.C.S. Eng., Joint Professor of Physiology at Queen's College, Birmingham; Honorary Surgeon to the Birmingham General Hospital.

BASTIAN, H. CHARLTON, M.D., F.R.C.P. Lond., Professor of Pathological Anatomy and Clinical Medicine at University College.

BATES, TOM, L.R.C.P. Edin., M.R.C.S. Eng., Surgeon to the Worcester General Infirmary; Assistant-Surgeon to the Worcester Ophthalmic Hospital.

BAUMGARTNER, J. R., M.R.C.S. Eng., Surgeon to the Newcastle-on Tyne Children's Hospital.

BELL, A., L.R.C.P. Edin., M.R.C.S. Eng., Surgeon to the Hospital for Diseases of the Skin, Newcastle-on-Tyne.

BELLAMY, E., F.R.C.S. Eng., Surgeon to, and Lecturer on Anatomy at, Charing-cross Hospital.

BENNETT, J. MOORE, M.D. St. And., M.R.C.S. Eng., Consulting Surgeon to the Liverpool Dispensary; Surgeon to the Liverpool Surgical Home for Diseases of Women.

BENNETT, W. H., F.R.C.S. Eng., Lecturer on Histology and Joint Lecturer on Practical Surgery at St. George's Hospital.

BERKART, J. B., M.R.C.P. Lond., Assistant-Physician to the City of London Hospital for Diseases of the Chest.

BERRY, W., L.R.C.P. Edin., M.R.C.S. Eng., Honorary Surgeon to the Royal Albert Edward Infirmary and Dispensary; Medical Attendant to the Convent Notre Dame at Wigan.

BEST, G. PAYNE, M.B., M.R.C.S. Eng., Resident Surgeon at the Camp-hill Branch of the Birmingham General Dispensary.

BISS, C. YATES, M.B., M.R.C.P. Lond., Assistant-Physician to Middlesex Hospital and the Metropolitan Free Hospital.

BISSHOPP, J., L.R.C.P. Lond., M.R.C.S. Eng., Surgeon to the Tunbridge Wells Provident Dispensary.

BLACK, D. C., M.D. Glasg., F.R.C.S. Edin., Physician to the Glasgow Public Dispensary.

BLACKLOCK, A. W., M.D. Aberd., Honorary Physician to the Northern Counties Hospital for Diseases of the Chest, Newcastle-on-Tyne.

BLAND, A. R. H., M.D. Qu. Univ. Irel., Surgeon to the Cripple's Nursery; Physician to the North-Western London Free Dispensary for Children.

BOILEAU, J. P. H., M.D., F.R.C.S. Irel., Assistant Professor of Pathology in the Army Medical School, Netley.

BOOTH, J. M., M.B., Physician to the Aberdeen General Dispensary.

BOULTING, W., L.R.C.P. Lond., Surgeon to the Hampstead Provident Dispensary.

BOX, W. H., M.R.C.S. Eng., Lechlade, Gloucestershire.

BRETT, A. T., M.D. St. And., M.R.C.S. Eng., Medical Officer of the Watford Union House and District, Medical Officer of Health of the Watford Union District.

BROOK, C., M.R.C.S. Eng., Surgeon to the Lincoln County Hospital, Consulting Surgeon to the Lincoln County Asylum.

BROWN, G. ARTHUR, M.R.C.S. Eng., Chief Surgeon to the Tredegar Ironworks; Medical Officer of Health of the Tredegar Union District.

BROWN, J., L.K.Q.C.P. Irel., Medical Officer of Bolingbroke Hospital.

BRYANT, T., F.R.C.S. Eng., Surgeon and Lecturer on Surgery to Guy's Hospital, and Examiner in Surgery to the Universities of Cambridge and Durham, and the Royal College of Physicians, London.

BULL, W. H., L.R.C.P. Lond., M.R.C.S. Eng., Surgeon to Stony Stratford Cottage Hospital.

BUNTING, J., M.R.C.S. Eng., Surgeon to the Tottenham and Edmonton General Dispensary.

BURCHELL, P. L., M.B. Lond., F.R.C.S. Eng. (Exam.), Surgeon-Accoucheur and Consulting Surgeon to the Out-door Department of the City of London Hospital.

BURMAN, W. MAXWELL, L.R.C.P. Lond., M.R.C.S. Eng., Medical Officer of Health to the Wath Union District.

BURNETT, R. W., M.D. Aberd., Physician to the Great Northern Hospital.

BUSH, R. H., M.D., Physician to the St. Pancras and Northern Dispensary.

BUTLIN, H. T., L.R.C.P. Lond., F.R.C.S. Eng., Assistant-Surgeon and Demonstrator of Surgery to St. Bartholomew's Hospital.

BYERS, JOHN W., M.A., M.D., Physician to the Hospital for Sick Children, Belfast.

CARRINGTON, R. E., M.D. Lond., Senior Demonstrator of Anatomy at Guy's Hospital; Visiting Physician to the Seamen's Hospital, Greenwich.

CHAPMAN, P. M., M.B., L.R.C.P. Lond., Obstetric Physician to the St. Marylebone General Dispensary.

CHEYNE, W. WATSON, M.B. Edin., F.R.C.S. Eng., Assistant-Surgeon to King's College Hospital, and Demonstrator of Surgery to King's College.

CHURTON, T., M.D. Aberd., Physician to the Leeds General Infirmary, Public Dispensary, and Fever Hospital.

CLARKE, T., L.R.C.P. Edin., Medical Officer of Health to the Pewsey (Wilts) Rural District.

CLEGG, W. T., M.R.C.S. Eng., Senior Resident Medical Officer to the North Stafford Infirmary.

CLIBBORN, W., M.D. Dub., Honorary Surgeon to the Birmingham Lying-in Charity, and Surgeon to the Birmingham, &c., Provident Dispensaries.

CLUTTON, H. H., M.B., F.R.C.S. Eng., Assistant-Surgeon and Aural Surgeon to St. Thomas's Hospital.

COCKLE, J., M.D. Aberd., F.R.C.S. Eng., Senior Physician to the Royal Free Hospital; Physician to the Warehousemen and Clerks' School; Examining Physician to the Royal National Hospital for Consumption.

COGHILL, J. G. SINCLAIR, M.D., F.R.C.P. Edin., Visiting Physician at the Royal National Hospital for Consumption, Ventnor; Lecturer on General Pathology and Pathological Anatomy to the Edinburgh Medical School.

COHEN, A., M.B., Metropolitan Free Hospital, Commercial-street, Spitalfields.

COLEMAN, A., L.R.C.P. Lond., F.R.C.S. Eng., Examiner in Dental Surgery to the Royal College of Surgeons, England; Dental Surgeon and Lecturer on Dental Surgery at St. Bartholomew's Hospital; Senior Dental Surgeon and Lecturer on Dental Surgery at the Dental Hospital.

COLLENETTE, B., L.R.C.P. Edin., M.R.C.S. Eng., Physician to the Guernsey Hospital.

CONSTABLE, J. J. C., M.D. St. And., Physician to the St. John's and St. Elizabeth's Hospital, Great Ormond-street, and to St. Peter's Home for the Aged and Infirm, Fentiman-road.

COOK, F., M.D. Edin., M.R.C.P. Lond., Senior Physician to the Cheltenham General Hospital.

COOK, R. F., M.B. Durh., M.R.C.S. Eng., Medical Officer of the Western District and Workhouse, Gateshead Union.

COOKE, R. T. E. B., L.R.C.P., F.R.C.S. Edin., Consulting Surgeon to the Scarboro' Dispensary; Honorary Surgeon to the Royal North Sea Bathing Infirmary.

COOKE, T., L.R.C.P. Edin., M.R.C.S. Eng., Medical Officer of Health to the Fourth Division of the Ashton-under-Lyne Rural District and Hurst Union District.

COOKE, T., M.D., F.R.C.S. Eng., Senior Assistant-Surgeon to Westminster Hospital.

COPE, J. T., M.R.C.S. Eng., Medical Officer of Health and Medical Officer of the Halwell District of the Totnes Union.

CORY, R., M.D., M.R.C.S. Eng., Assistant Obstetric Physician to St. Thomas's Hospital; Joint Lecturer on Forensic Medicine to St. Thomas's Hospital Medical School.

COTTERILL, J. M., M.B., F.R.C.S. Edin., Clinical Surgeon Tutor at the University, Edinburgh.

COUSINS, J. WARD, M.D. Lond., Surgeon to the Royal Portsea, Portsmouth, and Gosport Hospital.

CRESSWELL, PEARSON R., F.R.C.S. Edin., M.R.C.S. Eng., Chief Surgeon to the Dowlais Ironworks; Surgeon to the Dowlais Surgical Hospital.

CREW, E., L.R.C.P. Edin., M.R.C.S. Eng., Medical Officer of Health, Chorley, Lancashire.

CRITCHETT, G. ANDERSON, M.R.C.S. Eng., Ophthalmic Surgeon to the Royal Free Hospital.

CROFT, J., F.R.C.S. Eng., Surgeon to, and Lecturer on Practical Surgery at, St. Thomas's Hospital; Consulting Surgeon to Magdalen Hospital.

CROUDACE, J. H., L.R.C.S. Edin., Castle Cary, Somerset.

CULLIMORE, D. H., 15A, Connaught-square, London.

DALBY, W. B., M.B., F.R.C.S. Eng., Aural Surgeon to, and Lecturer on Dental Surgery at, St. George's Hospital.

DALE, W., M.B., M.R.C.S. Eng., Physician to the West Norfolk and Lynn Hospital.

DAVIES, D., F.R.C.S. Eng., Medical Officer of Health, Aberdare; Certifying Factory Surgeon.

DAVIES, J. H., L.R.C.P., L.R.C.S. Edin., Medical Officer and Public Vaccinator, Northern Division, Llandilofawr Union.

DAVIS, J. H., M.D. Lond., Obstetric Physician and Lecturer on Obstetric Medicine to Middlesex Hospital.

DENT, C. T., F.R.C.S. Eng., Assistant-Surgeon to St. George's Hospital; Surgeon to Belgravia Hospital for Children.

DEVEREUX, D., M.D. St. And., L.R.C.P. Lond., Surgeon to Tewkesbury Hospital.

DEWAR, J. A., M.D., L.R.C.S. Edin., Parochial Medical Officer of the West Division of the Inverkeilor and North District, Arbroath.

DOMENICHETTI, R., M.D., L.R.C.S. Edin., Medical Officer of Health to the Louth Rural and Union Districts; Deputy Inspector-General of the Army.

DOUGAL, J., M.D. Glasg., Ext. Dispensing Physician to the Glasgow Royal Infirmary, and Lecturer on Materia Medica at the Glasgow Royal Infirmary School of Medicine.

DOWN, J. LANGDON, M.D. Lond., Physician to the London Hospital; Lecturer on Clinical Medicine at the London Hospital Medical School.

DOWNES, A., M.D. Aberd., Medical Officer of Health for Chelmsford and Maldon Rural Districts.

DRUMMOND, D., M.D. Dub., Lecturer on Physiology at the University of Durham, Physician and Physiologist to the Newcastle-on-Tyne Infirmary.

DUDLEY, W. L., M.D. St. And., Physician to the City Dispensary.

DUKES, C., M.D. Lond., Medical Officer of Rugby School and Rugby Hospital.

DUNCANSON, J. J. KIRK, M.D. Edin., Lecturer on Aural Surgery at the Edinburgh School of Medicine; Surgeon to the Dispensary for Diseases of the Ear, Cambridge-street, and Assistant-Surgeon to the Eye Infirmary, Edinburgh.

DUNLOP, J., M.D. Glasg., Surgeon to the Lock Hospital and Royal Infirmary, Glasgow.

DURHAM, A. E., F.R.C.S. Eng., Member of the Board of Examiners of the Royal College of Surgeons, England; Surgeon and Lecturer on Surgery to Guy's Hospital; Consulting Surgeon to the St. Albans Hospital and Dispensary.

DYSON, W., M.D. Lond., Physician to the Sheffield Public Hospital and Dispensary; Lecturer on Physiology and Clinical Medicine at the Sheffield School of Medicine.

EAGER, T. CAWLEY, L.R.C.P. Edin., M.R.C.S. Eng., Medical Officer of Health, Medical Officer and Public Vaccinator to the Woking District, Guildford Union; Surgeon to the Royal Dramatic College.

EALES, H., M.R.C.S. Eng., Honorary Surgeon to the Birmingham and Midland Eye Hospital; Demonstrator of Anatomy at Queen's College, Birmingham.

EDDISON, J. E., M.D. Edin., M.R.C.S. Eng., Physician to the Leeds Infirmary, Fever Hospital, and Public Dispensary.

EDDOWES, A. B. J., M.R.C.S. Eng., Honorary Surgeon to the Loughborough Infirmary and Dispensary.

EDDOWES, W., M.R.C.S. Eng., L.S.A., Surgeon to the Salop Infirmary.

EDIS, A. W., M.D. Lond., Assistant Obstetric Physician to the Middlesex Hospital; Physician to the British Lying-in Hospital, and to the Dressmakers' Provident and Benevolent Institution.

EDIS, J. BUTLER, L.R.C.P. Ed., M.R.C.S. Eng., Honorary Assistant Medical Officer to the Liverpool Ladies' Charity and Lying-in Hospital.

ELDER, G., M.D. Glasg., Surgeon to the Hospital for Women, Nottingham.

ELLIOTT, G. F., M.D., L.C.D., M.R.C.P. Lond., Physician to the Hull General Infirmary.

ELLIS, H. W. T., L.R.C.P. Edin., M.R.C.S. Eng., Medical Officer of Health, Crowle.

EVANS, J. H., M.R.C.P. Edin., M.R.C.S. Eng., Medical Officer of Health of the Litherland Union District; Honorary Medical Officer to the Seaforth Dispensary.

EVANS, W., L.R.C.P. Edin., M.R.C.S. Eng., Consulting Physician to the Dinorben Cottage Hospital.

FAIRBANK, F. ROYSTON, M.D. Heidelb., M.R.C.P. Edin., Surgeon to the Doncaster Infirmary and to the West Riding Reformatory.

FARQUHARSON, J., L.R.C.P., L.R.C.S. Edin., Honorary Surgeon to the Surgical Hospital and to the Dispensary, Stockton-on-Tees.

FAYRER, Sir JOSEPH, K.C.S.I., M.D. Edin., F.R.C.P. Lond., F.R.G.S. Eng., Honorary Physician to Her Majesty the Queen and to His Royal Highness the Prince of Wales; Physician to His Royal Highness the Duke of Edinburgh; President of the Medical Board, India Office.

FIELD, G. P., M.R.C.S. Eng., Aural Surgeon to St. Mary's Hospital and Lecturer on Aural Surgery in the Medical School.

FINLAY, D. W., M.D., M.R.C.P. Lond., Assistant-Physician to the Middlesex Hospital; Physician to the Royal Hospital for Diseases of the Chest.

FISH, J. C., M.D., Senior Assistant Physician to the West London Hospital.

FISHER, T. C., M.B. Dub., Senior Medical Exhibitor to the School of Physicians, Trinity College, Dublin.

FITZGIBBON, H., M.D. T.C.D., L.K.Q.C.P. Irel., Surgeon and Lecturer on Clinical Surgery to the City of Dublin Hospital; Physician to the House of Rest, Merrion.

FLINN, D. E., L.R.C.S. Irel., M.K.Q.C.P. Irel., Medical Officer and Public Vaccinator to the Ogley Hay District of the Lichfield Union.

FOLKER, W. H., F.R.C.S. Eng., Senior Surgeon to the North Staffordshire Infirmary.

FOOTE, HARRY D'OYLEY, M.D., M.R.C.S., Senior Surgeon, Rotherham Hospital.

FORSHALL, F. HYDE, M.R.C.P. Edin., L.R.C.P. Lond., Medical Officer and Public Vaccinator of the Highgate District, Edmonton Union.

FOSTER, BALTHAZAR, M.D., F.R.C.P. Lond., Professor of Medicine in Queen's College, and Physician to the General Hospital, Birmingham.

FOTHERBY, H. I., M.D. Lond., Physician to the Metropolitan Free Hospital.

FOX, J. M., M.R.C.S. Eng., Medical Officer of Health of the Midland Cheshire Combined Districts.

FRAZER, H., M.D. Univ. Glasg., L.R.C.S. Irel., Physician to Shiels' Institution and to the Blind Asylum, Armagh; Consulting Sanitary Officer to the Armagh Rural District.

GALABIN, A. L., M.D., Assistant Obstetric Physician and Joint Lecturer on Midwifery at Guy's Hospital; Examiner in Obstetric Medicine to the University, Cambridge.

GALTON, J. H., M.D. Lond., Surgeon to the Anerley Dispensary and Lying-in Charity.

GAMGEE, J. SAMPSON, M.R.C.S. Eng., F.R.S. Edin., Consulting Surgeon to the Queen's Hospital, Birmingham.

GAYLOR, E., L.R.C.P. Edin., Medical Officer of Health to the Heage Urban District, Belper Rural District, and Alfreton and Ripley Urban Districts.

GILL, J., L.R.C.P. Edin., Surgeon to the Stratford-on-Avon Infirmary.

GLYNN, F. R., M.B., M.R.C.P. Lond., Physician to the Royal Infirmary and to the Cathcart Blind Asylum, and Medical Officer of Her Majesty's Customs, Liverpool.

GOODSALL, F. W. W., M.R.C.S. Eng., L.S.A., Resident Medical Officer to the Farringdon Dispensary, London, E.C.

GOUDE, H., F.R.C.S. Edin., M.R.C.S. Eng., Resident Surgeon to the Small-pox and Vaccination Hospital, Highgate-hill.

GOURLEY, S., M.D. Glasg., F.R.C.S. Edin., Senior Surgeon to the Hartlepool Hospital; Medical Officer and Public Vaccinator to the Stratton District, Hartlepool Union.

GRAMSHAW, J. H., M.D. St. And., F.R.C.S. Eng., Consulting Surgeon to the Gravesend Infirmary and Dispensary, Examining Surgeon under the Contagious Diseases Act.

GRATTAN, N., L.R.C.P., L.R.C.S. Edin., Surgeon to the Cork Hospital for Diseases of Women and Children.

GRIFFITH, W. B., L.R.C.P., L.R.C.S. Edin., District Medical Officer and Public Vaccinator to the Bootle Union.

GROSE, S., M.D. St. And., F.R.C.S. Eng., Honorary Medical Officer of the Melksham Cottage Hospital.

GUPPY, T. STOKES, M.D. King's Coll. Aberd., Admiralty Surgeon and Agent; Surgeon to the Falmouth Dispensary and to the Great Western Railway Provident Society.

HADDEN, J., M.D. Queen's Univ., Ireland, Physician to the Horncastle Dispensary.

HAMILTON, J., F.R.C.S., L.R.C.P. Edin., Medical Officer and Public Vaccinator of the Gresley District, Burton-on-Trent Union.

HARRIS, T. DAVIES, L.R.C.P. Lond., F.R.C.S. Eng., Honorary Surgeon to the Aberystwith Infirmary and Cardiganshire General Hospital.

HARRISON, C., M.D. St. And., Physician to the Lincoln County Hospital and to the General Dispensary.

HARRISON, REGINALD, F.R.C.S. Eng., Surgeon to the Royal Infirmary, Liverpool; Consulting Surgeon to the Bootle Borough Hospital and Seamen's Orphan Institution.

HAYDON, N. J., M.D. St. And., F.R.C.S. Eng., Surgeon to the Minchinhampton Dispensary.

HAYNES, STANLEY L., M.D. Edin., M.R.C.S. Eng., Medical Officer of the Malvern Dispensary.

HEMMING, W. D., F.R.C.S. Edin., M.R.C.S. Eng., Surgeon to the Boscombe Infirmary; Lecturer to the St. John Ambulance Association.

HERON, G. A., M.D. Glasg., Assistant-Physician to the City of London Hospital for Diseases of the Chest; Physician to the West-end Hospital for Nervous Diseases.

HICKINBOTHAM, J., M.D., Ch.M. Heidelb., Consulting Obstetric Physician to the Birmingham Provident Dispensary, Physician to the Birmingham and Midland Hospital for Women.

HIGGENS, C., L.R.C.P. Lond., F.R.C.S. Eng., Ophthalmic Assistant-Surgeon at, and Lecturer on Ophthalmology to, Guy's Hospital.

HITCHINS, C. VERNON, M.R.C.S. Eng., L.S.A., Honorary Surgeon to the Weston-super-Mare Hospital and Dispensary.

HOLDEN, J. SINCLAIR, M.D. Queen's Univ., Ireland, Medical Officer of Health to the Sudbury Union, and Borough Medical Officer to St. Leonard's Hospital.

HOLDER, W., M.R.C.S. Eng., Medical Officer and Public Vaccinator of the Sutton District, Sculcoates Union; Surgeon to the Hull and Sculcoates Dispensary.

HOLDERNESS, W. BROWN, M.R.C.S. Eng., L.S.A., Surgeon to the Royal Infirmary, Windsor; St. Andrew's Convalescent and St. John's Hospitals, Clewer.

HOLLAND, E., M.D. Lond., F.R.C.S. Eng., Assistant-Physician to the Hospital for Women, London.

HOLMES, T., F.R.C.S. Eng., Chief Surgeon to the Metropolitan Police; Surgeon and Lecturer on Surgery at St. George's Hospital.

HOOD, D. M. C., M.D. Cantab., M.R.C.P. Lond., Assistant-Physician to the West London Hospital.

HOOPER, D., M.B. Lond., M.R.C.S. Eng., Physician to the Surrey Dispensary, Great Dover-street, and the Public Dispensary, Stanhope-street, London.

HOPGOOD, P. DOWNING, M.R.C.S. Eng., Medical Officer of Health of the Stow-on-the-Wold Union District.

HOPKINS, H. CULLIFORD, L.R.C.P. Edin., M.R.C.S. Eng., Surgeon to the Eastern and Western Dispensaries, Bath.

HOWELL, H. S., M.D. St. And., Honorary Surgeon to the Western General Dispensary, and Surgeon to Her Majesty's Royal Italian Opera.

HOWSE, W., L.R.C.P. Lond., M.R.C.S. Eng., New Swindon.

HULKE, J. W., F.R.C.S. Eng., Surgeon and Lecturer on Surgery at the Middlesex and the Royal London Ophthalmic Hospitals, Member of the Court of Examiners of the Royal College of Surgeons.

HUNTER, W. B., M.D. Glas., Physician to Smedley's Institution, Matlock-bank.

IKIN, J. INGHAM, F.R.C.S. Eng., Surgeon to the Leeds Hospital for Women and Children.

JACKSON, J. HUGHLINGS, M.D. St. And., F.R.C.P. Lond., Physician to the Hospital for Epilepsy and Paralysis, and to the London Hospital.

JACKSON, T. VINCENT, M.R.C.S. Eng., Senior Surgeon to the Wolverhampton and Staffordshire General Infirmary.

JACOBSON, W. H., M.B., F.R.C.S. Eng., Assistant-Surgeon to Guy's Hospital; Demonstrator of Morbid Histology to Guy's Hospital Medical School.

JAGIELSKI, V. A., M.D. Berlin, M.R.C.P. Lond., Honorary Physician to the Infirmary for Consumption &c., Margaret-street.

JALLAND, W. HAMILTON, F.R.C.S. Eng., Surgeon to the York County Hospital.

JAMES, W. CULVER, M.D. Aberd., Physician to Westminster Dispensary, and Surgeon to the Chelsea, Brompton, and Belgrave Dispensaries.

JAMIESON, W. ALLAN, M.D., F.R.C.P. Edin., Physician to the Royal Dispensary, Edinburgh, and Lecturer on Diseases of the Skin at the Edinburgh School of Medicine.

JARDINE, J. BELL, M.D. Edin., Medical Officer of the Government Lock Hospital, Chatham.

JEAFFRESON, C. S., F.R.C.S. Edin., M.R.C.S. Eng., Surgeon to the Newcastle-on-Tyne Eye Infirmary and to the Children's Hospital.

JELLEY, R., M.R.C.S. Eng., Medical Officer of Health of the Totnes Union District.

JESSETT, F. BOWREMAN, F.R.C.S. Eng., L.S.A., Surgeon to the Erith, Crayford, and Belvedere Cottage Hospital.

JOHNSON, G., M.D. Lond., Physician to King's College Hospital, Professor of Clinical Medicine at King's College.

JOHNSON, R. LOCKE, L.R.C.P., L.R.C.S. Edin., Physician to the North London Consumption Hospital; Physician to the St. John's Hospital for Skin Diseases, Leicester-square.

JONES, A. EMRYS, M.D. Edin., M.R.C.S. Eng., Assistant-Surgeon to the Manchester Royal Eye Hospital.

JONES, H. MACNAUGHTEN, M.D. Queen's Univ. Irel., Professor of Midwifery at Queen's College, Cork; Surgeon to the Cork Ophthalmic and Aural Hospital; Physician to the Cork Fever Hospital.

JONES, S., M.B. Lond., F.R.C.S. Eng., Senior Surgeon and Lecturer on Surgery to St. Thomas's Hospital, Consulting Surgeon to the Central London Throat and Ear Hospital.

JORDAN, FURNEAUX, F.R.C.S. Eng., Surgeon to Queen's Hospital, Professor of Surgery at Queen's College, and Surgeon to the Women's and West Bromwich Hospitals, Birmingham.

KEBBELL, W., M.D. Edin., M.R.C.P. Lond., Senior Physician to the Sussex County Hospital.

KEENE, J., F.R.C.S. Eng., Aural Surgeon and Lecturer on Aural Surgery at Westminster Hospital.

KEETLEY, C. B., F.R.C.S.E., Assistant-Surgeon to the West London Hospital, and Surgeon to the Surgical Aid Society.

KELLY, C., M.D., M.R.C.P. Lond., Medical Officer of Health of the West Sussex Combined District; Professor of Hygiene at King's College, London.

KEMPE, A. WIGHTMAN, L.R.C.P. Edin., M.R.C.S. Eng., Medical Officer of Health for Exmouth.

KITCHENER, T., M.D. St. And., M.R.C.S. Eng., Physician to the Bath Southern Dispensary.

LANCASTER, W. J., M.R.C.S. Eng., Honorary Surgeon to the Beckett Hospital and Dispensary.

LANGTON, J., F.R.C.S. Eng., Assistant-Surgeon to St. Bartholomew's Hospital, and Lecturer on Descriptive and Surgical Anatomy at the Medical School.

LATHAM, P. W., M.D. Camb., F.R.C.P. Lond., Downing Professor of Medicine, University of Cambridge.

LAWRENCE, A. E. AUST, M.D. Aberd., Physician-Accoucheur to the Bristol General Hospital, Joint Lecturer on Midwifery and Diseases of Women at the Bristol Medical School.

LAWSON, G., F.R.C.S. Eng., Surgeon to the Royal London Ophthalmic Hospital, Moorfields; Surgeon and Lecturer on Surgery to the Middlesex Hospital.

LAWTON, H. A., L.R.C.P. Lond., M.R.C.S. Eng., Medical Officer of Health to the Poole Union and Ports District; Medical Officer to the Poole Fever Hospital.

LEACH, J. COMYNS, M.D. Durh., M.R.C.S. Eng., County Coroner for Dorset, Medical Officer of Health of the Sturminster Rural District.

LEATHEM, J., M.D. Qu. Univ. Irel., L.M.K.Q.C.P. Irel., Surgeon to the Liverpool Hospital for Fistula.

LEDIARD, H. A., M.D. Edin., F.R.C.S. Eng., Surgeon to the Cumberland Infirmary.

LEIGH, RICHMOND, M.R.C.S. Eng., Surgeon to St. George's Hospital for Diseases of the Skin, and Assistant Medical Officer to the Ladies' Charity and Lying-in Hospital, Liverpool.

LE PAGE, W., L.R.C.P. Edin., L.S.A. Lond., Surgeon to the Hospital at St. Peter Port, and Medical Officer of South District, St. Peter Port Parish, Guernsey.

LIVEING, R., M.D. Camb., Physician to the Skin Department and Lecturer on Diseases of the Skin, Middlesex Hospital; Examiner for the M.B. Degree, Cambridge.

LLOYD, A. EYTON, L.R.C.P. Edin., M.R.C.S. Eng., Surgeon to the Children's Hospital and Convalescent Home and to the Women's Convalescent Home, Rhyl.

LLOYD, J. JENKIN, L.R.C.P. Edin., Denbighshire General Infirmary.

LLOYD-ROBERTS, J., M.B. Edin., Medical Officer to the Denbighshire General Infirmary.

LOMBE, T. R., M.D. King's Coll. Aberd., Physician to the Erith House Institution for Invalid Ladies and to the Western Hospital for Consumption.

LOVE, J. H., M.R.C.S. Eng., Medical Officer of Health, Wolverhampton.

LOWE, J., M.D. Edin., Medical Attendant to H.R.H. the Prince and Princess of Wales at Sandringham, Consulting Surgeon to the West Norfolk and Lynn Hospital.

LOWE, SEPTIMUS, L.R.C.P. Edin., M.R.C.S., L.S.A., Surgeon to the Lincoln County Hospital.

LOWNDS, T. M., M.D. Edin., Egham-hill; late Professor of Anatomy and Physiology, Grant Medical College, Bombay.

LOW, R. BRUCE, M.D. Edin., Medical Officer and Public Vaccinator to the Helmsley District and Workhouse; Medical Officer of Health, Helmsley.

LUCAS, H., M.R.C.S. Eng., Surgeon to H.M. Prison and County Hospital, Huntingdon.

LUCAS, R. CLEMENT, M.B., L.R.C.P. Lond., F.R.C.S., Assistant Surgeon and Demonstrator of Operative and Practical Surgery at Guy's Hospital; Surgeon to the Evelina Hospital for Sick Children.

LUSH, W. J. H., M.D. Brussels, F.R.C.P. Edin., Honorary Visiting Medical Officer to Andover Cottage Hospital; Physician and Proprietor of Weyhill Private Sanatorium.

LYNCH, G., M.D. Dub., Senior Physician to Westminster General Dispensary; Visiting Physician to Margaret-street Infirmary for Consumption.

MACFARLANE, A. W., M.D., Consulting Physician to the Kilmarnock Infirmary.

M'HARDY, M. MACDONALD, F.R.C.S. Edin., M.R.C.S. Eng., Professor of Ophthalmology to King's College; Ophthalmic Surgeon to King's College Hospital.

MACINLAY, J. G., L.R.C.P. Lond., M.R.C.S. Eng., Surgeon to the Westminster Ophthalmic Hospital; Assistant-Surgeon to the Royal South London Ophthalmic Hospital.

MACINTOSH, A., M.D. Glasg., Medical Officer to the Chesterfield, &c., Unions.

MACKAY, J. C., L.R.C.P., L.R.C.S. Edin., St. Columb.

MACKENZIE, S., M.D., F.R.C.P. Lond., Senior Assistant-Physician and Physician in Charge of the Department for Skin Diseases at the London Hospital; Lecturer on the Principles and Practice of Medicine to the London Hospital Medical School.

MACKINDER, D., M.D. St. And., F.R.C.S. Edin., Consulting Surgeon to the Gainsborough Dispensary.

MACLAREN, R., M.D. Edin., Surgeon to the Cumberland Infirmary.

MACNAB, R., M.D. Glasg., F.R.C.S. Edin., Surgeon to the Suffolk General Hospital and to the Suffolk Yeomen Cavalry.

MACNAMARA, C., F.R.C.S. Eng., Surgeon to the Westminster Hospital and to the Royal Westminster Ophthalmic Hospital.

M'NEILL, J. P., M.D., Honorary Physician to the Tiverton Infirmary.

MAGRATH, J., M.D. Qu. Univ. Irel., Physician to the East Grinstead General Dispensary.

MARSDEN, A., M.D. St. And., F.R.C.S. Edin., Consulting Surgeon to the Royal Free Hospital, Senior Surgeon to the Cancer Hospital.

MARSDIN, F., M.B. Lond., F.R.C.S. Eng., Surgeon to the Eastbourne Provident Dispensary.

MARSHALL, J., F.R.C.S. Eng., Professor of Surgery to the University College; Surgeon to the University College Hospital; Consulting Surgeon to the Brompton Consumption Hospital.

MARSHALL, L. W., M.D. Aberd., Surgeon to the Children's Hospital, Nottingham.

MASON, F., F.R.C.S. Eng., Surgeon and Lecturer on Anatomy to St. Thomas's Hospital; Consulting Surgeon to the St. Pancras and Northern Dispensary.

MASON, S. BUTLER, L.R.C.P. Edin., Medical Officer of Health for Pontypool.

MAY, E. HOOPER, M.D. St. And., F.R.C.S. Eng., Surgeon to the Tottenham General Dispensary and to the Training Hospital.

MEARNS, W. P., M.B., University of Durham College of Medicine, Newcastle-on-Tyne.

MELDON, A. S., L.K.Q.C.P. Irel., F.R.C.S. Irel., Physician to the Dublin Provident Infirmary and General Dispensary; Physician to the Dublin Infirmary for Diseases of the Skin; Demonstrator of Anatomy to the Catholic University School of Medicine.

MEREDITH, J., M.D. Edin., Medical Officer of Health to the Wellington Union District.

MERLIN, W. J., L.R.C.P. Edin., Medical Officer of Health, Medical Officer and Public Vaccinator of the Sutton District of the Ely Union.

MIALL, P. E., M.R.C.S. Eng., Surgeon to the Bradford Infirmary.

MITCHINSON, G., L.K.Q.P.I. Irel., M.R.C.S. Eng., Physician to the County Hospital and Lunatic Hospital, Lincoln.

MOFFAT, T., M.D. St. And., L.R.C.S. Edin., Hawarden.

MONTGOMERY, J. B., M.D. Glas., Physician to the West Cornwall Infirmary and Dispensary.

MOORE, MILNER M., M.D. Durh., Surgeon to the Coventry and Warwick Hospital.

MORGAN, J. H., F.R.C.S. Eng., Assistant-Surgeon to the West London Hospital and to the Hospital for Children, Great Ormond-street; Surgeon to St. George's, Hanover-square, Dispensary.

MORGAN, W. W., M.D. St. And., Newport, Monmouthshire.

MORISON, J. RUTHERFORD, M.B., F.R.C.S. Ed., Medical Officer of Health for the Hartlepool and Throston Union Districts.

MORRIS, C. K., M.R.C.S. Eng., Surgeon to the Spalding Infirmary and Dispensary, Medical Officer of Health of the Spalding Union District.

MORRIS, E., M.D. St. And., F.R.C.S. Eng., Surgeon to the Spalding Dispensary and Union Infirmary.

MORTON, A. STANFORD, M.B., F.R.C.S. Edin., M.R.C.S. Eng., Senior Assistant Surgeon to the Royal South London Ophthalmic Hospital; Clinical Assistant to the Royal London Ophthalmic Hospital.

MURRAY, G. STANLEY, M.D. Qu. Univ. Irel., Physician to the Bolingbroke House Hospital.

MURRAY, W. BERKELEY, M.D. Edin., M.R.C.S. Eng., Medical Officer and Public Vaccinator to the Bockleton District of the Tenbury Union.

MURRELL, W., M.D., M.R.C.P. Lond., M.R.C.S. Eng., Senior Assistant-Physician to the Royal Hospital for Diseases of the Chest, Lecturer on Practical Physiology at the Westminster Hospital.

NAISMITH, W. J., M.D. Edin., Consulting Surgeon to the Ayr Fever Hospital and Dispensary, Medical Officer to the Ayr Industrial Schools.

NANKIVELL, A. WOLCOT, L.R.C.P. Lond., F.R.C.S. Eng., Resident Surgeon at St. Bartholomew's Hospital, Chatham.

NETHERCLIFT, W. H., M.R.C.S. Eng., Resident Medical Superintendent at the Chelsea Infirmary.

NETTLE, W., M.R.C.S. Eng., Medical Officer of the Liskeard Union Workhouse.

NETTLESHIP, E., F.R.C.S. Eng., Ophthalmic Surgeon and Lecturer on Ophthalmic Surgery to St. Thomas's Hospital.

NEWMAN, W., M.D. Lond., Surgeon to the Stamford and Rutland Dispensary.

NEWTON, L., M.R.C.S. Eng., Medical Officer of Health and Medical Officer to the Alconbury and Sawtry Districts of the Huntingdon Union.

NICHOLSON, J. FRANK, M.D. Lond., Physician to the Hull General Infirmary.

NORTON, A. T., F.R.C.S. Eng., Surgeon to and Surgeon in Charge of the Throat Department, St. Mary's Hospital; Lecturer on Surgery to the St. Mary's Medical School.

NUNN, P. W. G., L.R.C.P. Lond., M.R.C.S. Eng., Honorary Medical Officer to the St. Mary's Home for Invalid Ladies, and Honorary Surgeon to the Hospital for Diseases of the Hip in Childhood, Bournemouth.

NUNNELEY, J. A., M.B. Lond., M.R.C.S. Eng., Senior Ophthalmic and Aural Surgeon to the Leeds General Infirmary; Lecturer on Anatomy to the Leeds School of Medicine.

O'CONNOR, B., M.D., Physician to the Westminster General Dispensary.

OGLESBY, R. P., M.R.C.S. Eng., Ophthalmic and Aural Surgeon to the Leeds General Infirmary.

OLIVER, T., M.D. Glasg., Physician to the Newcastle-on-Tyne Infirmary; Lecturer on Practical Physiology to the University, Durham.

ORMEROD, J. A., M.R.C.P. Lond., M.R.C.S. Eng., Casualty Physician to St. Bartholomew's Hospital; Assistant Physician to the National Hospital for the Paralysed and Epileptic, and to the City of London Hospital for Diseases of the Chest.

OSBORN, S., F.R.C.S. Eng., Honorary Surgeon to the Metropolitan Convalescent Institution, Walton-on-Thames; Chloroformist to St. Thomas's Hospital.

OWEN, E., M.B. Lond., F.R.C.S. Eng., Senior Assistant-Surgeon to St. Mary's Hospital and to the Great Ormond-street Hospital for Children, Lecturer on Anatomy at St. Mary's Hospital Medical School.

OXLEY, M. G. B., M.K.Q.C.P.I. Irel., M.R.C.S. Eng., Senior Physician to the Liverpool Infirmary for Children.

PAGE, D., M.D., M.R.C.P. Edin., Medical Officer of Health to the Westmoreland and Sedbergh and Ulverston Unions.

PAGE, H. W., M.B., F.R.C.S. Eng., Assistant-Surgeon to St. Mary's Hospital; Lecturer on Practical Surgery in St. Mary's Hospital Medical School.

PALFREY, J., M.D. St. And., Senior Obstetric Physician and Lecturer on Midwifery and Diseases of Women at the London Hospital.

PARKINSON, C. H. WATTS, M.R.C.S. Eng., Medical Officer of Health to the Wimborne Rural District, Surgeon to the Wimborne Police.

PARTRIDGE, T., M.K.Q.C.P. Irel., Medical Officer of Health to the Stroud &c. Districts.

PEACOCK, T. BERILL, M.D. Edin., F.R.C.P. Lond., Honorary Consulting Physician to St. Thomas's Hospital; Consulting Physician to the City of London Hospital for Diseases of the Chest.

PEARCE, G., M.D. St. And., Surgeon to the Leicester Infirmary and Wyggestons Hospital.

PEMBERTON, OLIVER, F.R.C.S. Eng., Surgeon to the Birmingham General Hospital, Professor of Surgery at Queen's College.

PENFOLD, H., M.R.C.S. Eng., L.S.A., Senior Surgeon to the Sussex and Brighton Infirmary for Diseases of the Eye; Surgeon to the Blind Asylum.

PHELPS, A. M., M.B., M.R.C.S. Eng., Surgeon to the Holloway and North Islington Dispensary.

PHILIPSON, G. HARE, M.D. Cantab., F.R.C.P. Lond., Senior Physician to the Newcastle-on-Tyne Infirmary; Professor of Medicine to the University of Durham.

PICARD, P. KIRKPATRICK, M.D. Edin., M.R.C.S. Eng., Surgeon to the Kilburn Dispensary.

PICK, T. PICKERING, F.R.C.S. Eng., Member of the Board of Examiners in Anatomy and Physiology of the Royal College of Surgeons; Surgeon and Lecturer on Anatomy to St. George's Hospital.

PIERCE, F. MORRISH, M.D. Qu. Univ. Irel., L.R.C.P. Lond., M.R.C.S. Eng., Physician to the Hulme Dispensary; Senior Surgeon to the Manchester Ear Institution.

PITTS, B., M.B., F.R.C.S. Eng., Resident Assistant-Surgeon at St. Thomas's Hospital.

PLOWRIGHT, C. B., L.R.C.P. Edin., M.R.C.S. Eng., Surgeon to the West Norfolk and Lynn Hospital.

POLLOCK, A. JULIUS, M.D. St. And., F.R.C.P. Lond., Senior Physician and Lecturer on the Principles and Practice of Medicine to the Charing-cross Hospital.

POWELL, R. DOUGLAS, M.D. Lond., Physician to the Brompton Consumptive and Eastbourne Convalescent Hospitals.

PRATT, W., M.D. Liège, F.R.C.S. Eng., Medical Officer of Health and Medical Officer of the Newtown District, Newtown and Llanidloes Union; Surgeon to the Montgomeryshire Infirmary.

PRITCHARD, URBAN, M.D. Edin., F.R.C.S. Eng., Aural Surgeon to King's College Hospital; Surgeon to the Royal Ear Hospital; Assistant Examiner in Physiology, in Science, and Art Department, South Kensington.

PURCELL, F. A., M.D. Qu. Univ. Irel., Surgeon to the Cancer Hospital, Brompton.

PURNELL, J. J., F.R.C.S. Eng., Senior Surgeon to the Royal General Dispensary, Bartholomew-close.

PUZEY, C., L.R.C.P. Lond., M.R.C.S. Eng., Consulting Surgeon of the Liverpool District of the London and North-Western Railway, Honorary Surgeon to the Liverpool Northern Hospital.

RAMSKILL, J. S., M.D. Lond., Consulting Physician to the London Hospital; Senior Physician to the Hospital for the Paralysed and Epileptic.

RANKING, J. E., M.D., M.R.C.S. Eng., Physician to the Tunbridge Wells Infirmary.

REID, DOUGLAS A., M.D. Edin., M.R.C.S. Eng., Admiralty Surgeon and Agent of the Tenby District; in charge of troops at Penally and Tenby; Medical Officer of the Caldy Light Establishment.

REID, J. C., M.D., President of the Northern Counties Association of Medical Officers of Health.

REID, T. WHITEHEAD, M.R.C.P. Edin., L.R.C.P. Lond., Surgeon to the Kent and Canterbury Hospital.

RIDPATH, D., M.D. Edin., Medical Officer to the Driffield Cottage Hospital.

ROBERTS, C., M.R.C.S. Eng., Medical Officer of Health to the Uxbridge Rural District, Divisional Surgeon of Police.

ROBERTS, D. LLOYD, M.D. St. And., F.R.C.P. Lond., Physician to St. Mary's Hospital, Manchester.

ROBERTS, F. T., M.D. Lond., Professor of Materia Medica and Therapeutics to University College; Physician to University College Hospital.

ROBERTSON, W. H., M.D. Edin., F.R.C.P. Lond., Consulting Physician and Chairman of the Board of Trustees of the Devonshire Hospital and Buxton Bath Hospital.

ROBINSON, T., L.R.C.P. Lond., M.R.C.S. Eng., Medical Officer to the Western District of the Holborn Union.

ROSE, H. COOPER, M.D. St. And., Consulting Surgeon to the Hampstead Dispensary; Medical Officer of the Soldiers' Daughters' Home.

ROSE, WILLIAM, M.B. Lond., F.R.C.S. Eng., Assistant-Surgeon to King's College Hospital; Surgeon to the Royal Free Hospital.

ROSS, JAMES, M.D. Aberd., Physician to the Manchester Southern Hospital for Diseases of Women and Children; Assistant-Physician to the Royal Infirmary.

ROUSE, J., F.R.C.S. Eng., Surgeon to and Lecturer on Surgery at St. George's Hospital; Surgeon to the Royal Westminster Ophthalmic Hospital.

ROW, F., M.D. Edin., Consulting Surgeon to the Royal Albert Hospital, Devonport.

ROXBURGH, R., M.B., F.R.C.S. Ed., Honorary Physician to the Weston-super-Mare Hospital and Dispensary; Honorary Consulting Physician to the West of England Sanatorium.

RYLEY, J. BERESFORD, M.D. Brussels, Physician to the Finsbury Hospital for Women, and to the South Essex Dispensary.

RYOTT, F. E., M.D. St. And., F.R.C.S. Eng., Honorary Consulting Physician to the Newbury Dispensary, and Surgeon to the Workhouse Infirmary.

SANSOM, A. E., M.D. Lond., Senior Physician to the North-Eastern Hospital for Children, and Assistant-Physician to the London Hospital.

SAUNDBY, R., M.D. Edin., Assistant-Physician to the Birmingham General Hospital.

SAVAGE, G. H., M.D. Lond., Medical Superintendent and Resident Physician at Bethlem Hospital, London, S.E.

SAWYER, J., M.D. Lond., Physician to the Queen's Hospital; Professor of Materia Medica and Therapeutics to Queen's College, Birmingham.

SCATLIFF, J. M. ELBOROUGH, M.D. Aberd., M.R.C.S. Eng., Physician to the Brighton, Hove, and Sussex Throat and Ear Dispensary.

SEATON, E., M.D. Lond., Medical Officer of Health for the Borough of Nottingham; Physician to the Nottingham General Dispensary.

SHAND, J. CAPPIE, M.B. Glasg., Public Dispensary, Dundas-street, Glasgow.

SHARKEY, S. J., M.B., M.R.C.P. Lond., Assistant-Physician and Joint Lecturer on Physiology, and Demonstrator of Morbid Anatomy to St. Thomas's Hospital.

SHAW, J. E., M.B. Edin., Physician to the Royal Infirmary, and Lecturer on Materia Medica to the Bristol Medical School.

SHEEN, A., M.D. St. And., M.R.C.S. Eng., Surgeon to the Cardiff Infirmary, Medical Officer of the Cardiff Workhouse and Ely Industrial Schools.

SHELDON, E. M., M.R.C.S. Eng., Honorary Surgeon to the Stanley Hospital and to the Industrial Ragged Schools, Kirkdale.

SKERRITT, E. M., M.D. Lond., Physician to the General Hospital, and Lecturer on Medicine and Pathology to the Bristol Medical School.

SKINNER, R. V., M.R.C.S. Eng., Honorary Assistant-Surgeon to the 2nd Sussex Artillery Volunteers; Admiralty Surgeon and Agent, Coast Guard.

SMITH, EUSTACE, M.D. Lond., F.R.C.S. Eng., Physician to H.M. the King of the Belgians, and Chevalier of the Order of Leopold; Physician to the East London Hospital for Children and to the City of London Hospital for Diseases of the Chest.

SMITH, F. PORTER, F.R.C.S., M.R.C.S. Eng., Physician to the Shepton Mallet Hospital.

SMITH, G. KIRBY, F.R.C.S. Eng., Senior Surgeon to the Northampton General Infirmary.

SMITH, H., F.R.C.S. Eng., Professor of Surgery at King's College, and Surgeon to King's College Hospital; Consulting Surgeon to Westminster General Dispensary.

SMITH, R. SHINGLETON, M.D. Lond., Physician to the Bristol Royal Infirmary, Lecturer on Physiology and Dental Anatomy and Physiology to the Bristol Medical School.

SMITH, THOMAS, F.R.C.S. Eng., Surgeon to St. Bartholomew's Hospital and to the Children's Hospital, Great Ormond-street.

SMITH, T. GILBART, M.D. T.C. Dub., Assistant-Physician to the London Hospital and to the Royal Hospital for Diseases of the Chest.

SNELL, S., L.R.C.P. Lond., M.R.C.S. Eng., Ophthalmic Surgeon to the General Infirmary and School for the Blind, Sheffield.

SNOW, H. L., M.D. Lond., Surgeon to the Cancer Hospital, Brompton.

SOUTHAM, F. A., M.B., F.R.C.S. Eng., Assistant-Surgeon to the Manchester Royal Infirmary.

SPROULE, G. K., L.K.Q.C.P. Irel., Medical Officer and Public Vaccinator for the 1st District of the Frome Union.

STEAVENSON, W. E., M.B. Cantab., M.R.C.S. Eng., House-Surgeon to the Great Ormond-street Hospital for Children.

STEDMAN, J., L.R.C.P. Lond., M.R.C.S. Eng., Boscombe, Bournemouth.

STEELE, J. PEDDIE, M.D. Edin., Rome.

STEWART, T. GRAINGER, M.D., F.R.C.P. Edin., Professor of the Practice of Physic at the University of Edinburgh.

STOCKER, C. J., L.R.C.P. Lond., M.R.C.S. Eng., Medical Officer and Public Vaccinator of the East Ham and Little Ilford District of the West Ham Union.

STRANGE, W., M.D. Edin., Senior Physician to the Worcester Infirmary.

STRANGE, W. HEATH, M.D. Aberd., Surgeon to the Hampstead Dispensary.

STRETTON, W. HARRIS, M.R.C.P. Lond., M.R.C.S. Eng., Physician to the Farringdon Dispensary.

STURGES, O., M.D. Cantab., Physician and Lecturer on Medicine to Westminster Hospital, Assistant-Physician to the Great Ormond-street Hospital for Children.

SUTTON, F., M.R.C.S. Eng., Medical Officer to Willingham Cottage Hospital.

SWANN, A., M.D. Brussels, Surgeon to the Batley District Cottage Hospital.

SWINHOE, G. MONEY, L.R.C.P. Lond., M.R.C.S. Eng., Surgeon to the Great Western Railway Company's Works and Provident Society.

SYMPSON, T., L.R.C.P. Edin., F.R.C.S. Eng., Surgeon to the Lincoln County Hospital, General Dispensary, and Lunatic Hospital.

TANNER, J., M.D. St. And., M.R.C.P. Edin., Physician for Diseases of Women and Children, Farringdon General Dispensary; Obstetric Physician to the Lying-in Charity, Holborn; Physician to the Rev. C. H. Spurgeon's Metropolitan College.

TAYLOR, C. BELL, M.D., F.R.C.S. Edin., Honorary Surgeon to the Nottingham and Midland Eye Infirmary.

TAYLOR, F., M.D. Lond., Assistant-Physician and Lecturer on Hygiene at Guy's Hospital, Physician to the Evelina Hospital for Sick Children and to the British Orphan Asylum.

TAYLOR, J. W., M.D. St. And., M.R.C.S. Eng., Medical Officer of Health to the Scarborough Union District, Surgeon to the Scarborough Dispensary.

TEEVAN, W. F., F.R.C.S. Eng., Surgeon to the West London and St. Peter's Hospitals.

THOMAS, LL., M.D. Brussels, Surgeon to the Central London Throat and Ear Hospital.

THOMAS, W., M.B. Lond., F.R.C.S. Eng., Honorary Surgeon to the Children's Hospital, Birmingham.

THOMAS, W. R., M.D. Qu. Univ. Irel., Physician to the Sheffield Public Hospital and Dispensary.

THOMPSON, E., M.B. T.C.D., L.R.C.S.I., Surgeon to the Tyrone County Infirmary and Gaol, Visiting and Consulting Physician to the Tyrone and Fermanagh Lunatic Asylum.

THOMPSON, E. S., M.D. Lond., Physician to the Consumption Hospital, Brompton, Gresham Professor of Medicine.

THOMSON, W. SINCLAIR, M.D. Glasg., F.R.C.S. Edin., Consulting Surgeon to the Peterborough Infirmary; Surgeon to the Great Northern and Great Eastern Railway Companies.

TIBBITS, E., M.D. Lond., M.R.C.S. Eng., Physician to the Bradford Infirmary and Fever Hospital; Honorary Physician to the Bradford Institute for the Blind.

TIBBITS, HERBERT, F.R.C.P. Edin., M.R.C.S. Eng., Senior Physician to the West-end Hospital, London, for Diseases of the Nervous System.

TIMMINS, J. A. J., M.D. Aberd., L.R.C.P. Lond., Physician to the Carmarthenshire Infirmary, Medical Officer of Health &c. to the Llangendeirne Upper District of the Carmarthen Union.

TONGE-SMITH, WINCKWORTH, M.B. Aberd., M.R.C.S. Eng., Resident Medical Officer at the London Fever Hospital, Liverpool-road.

TOULMIN, W. CALVERT, L.R.C.P. Lond., M.R.C.S. Eng., Surgeon to the Invalid Asylum, Stoke Newington.

TREVES, F., F.R.C.S. Eng., Assistant-Surgeon to, and Senior Demonstrator of Anatomy at, the London Hospital.

TREVES, W. KNIGHT, F.R.C.S. Eng., Surgeon to the National Hospital for Scrofula, and Medical Officer of Health for Margate.

TRUMAN, E. BECKIT, M.D. St. And., M.R.C.S. Eng., Consulting Surgeon to the Nottingham Dispensary, and Public Analyst of Nottingham Borough and County.

TUCKWELL, H. M., M.D., Physician to the Radcliffe Infirmary, Oxford, Consulting Physician to Warneford Lunatic Asylum.

TUDOR, J., M.R.C.S. Eng., Senior Surgeon to the Dorset County Hospital.

TYSON, W. J., M.B. Durh., F.R.C.S. Eng., Medical Officer of the Folkestone Infirmary.

VACHELL, C. TANFIELD, M.D. Lond., Medical Officer to the Out-patient Department of the Glamorgan and Monmouth Infirmary, Surgeon to the 3rd Glamorgan Artillery.

VACHER, F., F.R.C.S., L.R.C.P. Edin., Medical Officer of Health and Public Analyst for Birkenhead.

VEVERS, H., M.R.C.S. Eng., Senior Surgeon of the General Infirmary and Surgeon of H.M. Prison, Hereford.

WALFORD, R., M.R.C.S. Eng., Resident Medical Officer of the Guest Hospital, Dudley.

WALKER, A. DUNBAR, M.D. Edin., Medical Officer of the North Kensington and Kensal Town Provident Dispensaries.

WALSH, T. W., F.R.C.S. Eng., Senior Surgeon to the Worcester General Infirmary.

WALTER, W., M.D. Dub., Obstetric Surgeon and House-Surgeon at St. Mary's Hospital and the Manchester and Salford Lying-in Hospital.

WALTERS, J., M.B. Lond., M.R.C.S. Eng., Medical Officer of the Reigate and Redhill Cottage Hospital; Surgeon to the Children's Home, Reigate.

WARDEN, C., M.D. Aberd., F.R.C.S. Edin., Senior Honorary Surgeon to the Birmingham Ear and Throat Infirmary; Honorary Surgeon to the Birmingham and Midland Counties Orthopædic and Spinal Hospital.

WARNER, F., M.D. Lond., M.R.C.P. Eng., Assistant-Physician to the London Hospital and to the London Hospital for Children.

WATERS, J. H., Kt. C. St.G., M.D. Glasg., Senior House-Surgeon of the Westminster Dispensary; Surgeon of the C Division of the Metropolitan Police.

WATSON, W. SPENCER, M.B. Lond., F.R.C.S. Eng., Surgeon at the Great Northern Hospital and Royal South Ophthalmic Hospital.

WATSON, W. TYNEDALE, M.D. Oxon., M.R.C.S. Eng., Physician to the Tottenham General Dispensary.

WAUGH, ALEXANDER, L.R.C.P. Lond., M.R.C.S. Eng.; Surgeon to the Paulton District Union.

WEAVER, J., M.D. St. And., L.R.C.P. Ed., Medical Officer of Health, and Surgeon to the Police, Longton, Staffordshire.

WEBB, W., M.D. St. And., F.R.C.S. Eng., Senior Medical Officer of the Wirksworth Cottage Hospital.

WEST, S., M.B. Oxon., M.R.C.P. Lond., Assistant Physician and Pathologist at the City of London Hospital for Diseases of the Chest, Victoria-park; Casualty Physician and Medical Tutor to St. Bartholomew's Hospital; Examiner in Anatomy and Physiology for 1st M.B. to the University, Oxford.

WHIPHAM, T. T., M.B. Oxon., F.R.C.P. Lond., Physician and Lecturer on Pathology, and Physician in Charge of Department for Diseases of the Throat, at St. George's Hospital.

WHISTLER, W. MACNEILL, M.D. Pennsyl., M.R.C.P. Lond., Physician to the Hospital for Diseases of the Throat and Chest; Honorary Physician to the National Training School for Music, London.

WHITE, W. HALE, M.B. Lond., M.R.C.S. Eng., Resident Medical Officer at the Evelina Hospital for Children, Southwark-bridge-road.

WHITE, W. HENRY, M.D., Assistant-Physician to the Royal Hospital for Diseases of the Chest; Physician to the St. Marylebone General Dispensary.

WHITEHEAD, W., F.R.C.S. Edin., Surgeon of the Manchester Royal Infirmary, and Surgeon to the Railway Passengers' Insurance Society.

WILKINSON, J. SEBASTIAN, F.R.C.S. Eng., Surgeon to the Central London Ophthalmic Hospital, West-end Ophthalmic Hospital, and to St. George's, Hanover-square, Dispensary.

WILL, J. C. OGILVIE, M.D. Aberd., Surgeon and Lecturer on Clinical Surgery at Aberdeen Royal Infirmary.

WILLIAMS, A. WYNN, M.D., Physician to the Samaritan Free Hospital for Diseases of Women and Children.

WILLIAMS, R., L.R.C.P. Edin., M.R.C.S. Eng., Surgeon to the Liverpool Eye and Ear Infirmary.

WILSON, E. T., M.B. Oxon., F.R.C.P. Lond., Physician to the Cheltenham General Hospital.

WOODBURN, J. COWAN, M.D. Glasg., Surgeon-Dentist to the Glasgow Royal Infirmary and to the Glasgow Western Public Dispensary.

WOODS, G. A., L.R.C.P. Ed., M.R.C.S. Eng., Honorary Surgeon to the Southport Infirmary and Dispensary; Medical Officer of the Southport Convalescent Hospital.

WORDSWORTH, J. CAWOOD, F.R.C.S. Eng., Senior Surgeon to the Royal London Ophthalmic Hospital; Consulting Ophthalmic Surgeon to the Stockwell Orphanage.

WORTHINGTON, J. COPLAND, L.R.C.P. Edin., M.R.C.S. Eng., Surgeon to the Lowestoft Hospital and Dispensary.

WRIGHT, A., M.R.C.S. Eng., Medical Officer of the Second District of the Romford Union.

WRIGHT, T., M.D. St. And., M.R.C.S. Eng., Consulting Surgeon to the Cheltenham General Hospital; Medical Officer of Health to the Cheltenham &c. Union Districts.

YARROW, G. EUGENE, M.D. Heidelb., L.R.C.P. Lond., Surgeon to the G Division of Police; Medical Officer of the City-road Workhouse of the Holborn Union; Medical Officer of the Out-door Department of the City of London Lying-in Hospital.

YEATS, W., M.D. Aberd., Surgeon to the Ardwick and Ancoats Hospital and Dispensary; Medical Officer of Manchester Industrial Schools.

Dr. BALL, Professor at the Paris School of Medicine, Physician to the Paris Hospitals.

Dr. BESNIER, Physician to the Paris Hospitals.

Dr. BROWN-SEQUARD, Professor at the Collége de France.

Dr. CHARCOT, Professor at the Paris School of Medicine, Physician to the Paris Hospitals, Member of the Academy of Medicine.

Dr. DAMASCHINO, Physician to the Paris Hospitals.

Dr. DIEULAFOY, Physician to the Paris Hospitals.

Dr. DUPLAY, Professor at the Paris School of Medicine, Surgeon to the Paris Hospitals, Member of the Academy of Medicine.

Dr. FERRIER, Surgeon to the Paris Hospitals.

Dr. FOURNIER, Professor at the Paris School of Medicine, Surgeon to the Paris Hospitals, Member of the Academy of Medicine.

Dr. GALEZOWSKI, Paris.

Dr. GELLE, Paris.

Dr. GOMBAULT, Physician to the Paris Hospitals.

Dr. NOEL GUENEAU DE MUSSY, Member of the Paris Academy of Medicine.

Dr. ALPHONSE GUERIN, Honorary Surgeon to the Paris Hospitals, Member of the Academy of Medicine.

Dr. GUYON, Professor at the Paris School of Medicine, Surgeon to the Paris Hospitals, Member of the Academy of Medicine.

Dr. OSCAR JENNINGS, Paris.

Dr. KRISHABER, Paris.

Dr. LABBE, Surgeon to the Paris Hospitals, Member of the Academy of Medicine.

Dr. MARTINEAU, Physician to the Paris Hospitals.

Dr. PANAS, Professor at the Paris School of Medicine, Surgeon to the Paris Hospitals, Member of the Academy of Medicine.

Professor PASTEUR, Member of the Paris Institute.

Dr. PEAN, Surgeon to the Paris Hospitals.

Dr. POZZI, Surgeon to the Paris Hospitals.

Dr. CH. RICHET, Agrégé of the Paris Faculty.

Dr. TERRILLON, Surgeon to the Paris Hospitals.

Dr. JULES WORMS, Paris.

Medical Diary for the ensuing Week.

Monday, Dec. 5.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
ROYAL INSTITUTION.—5 P.M. General Monthly Meeting.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Gilbart Smith, "On a Case of Hæmorrhage into the Mesentery."—Dr. Isambard Owen on two similar Cases.—Dr. Habershon, "On Cold Shock in its Action on the Branches of the Pneumogastric Nerve."—Dr. Dowse, "On some Points in the Differential Diagnosis of Intra-cranial Disease, General Paralysis of the Insane, and Tabes Dorsalis."

Tuesday, Dec. 6.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. The following specimens will be shown:—Joints from a Case of Gout; Tissues of a Patient with Hæmophilia; Specimens of Hydro- and Pyo-Salpinx; Calcified Adenoma of Scalp; Cirrhosis of Liver in a Child; Diseased Suprarenal Capsules; Bones from Genu Valgum; Case of Lateral Asymmetry; Fracture of Femur; Congenital Dislocation of Hip; Spinal Caries; Specimens of Ulcerative Endocarditis; Adenoma of Scalp.

Wednesday, Dec. 7.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department.—1.45 P.M., and on Saturday at 9.15 A.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
HUNTERIAN SOCIETY.—7.30 P.M. Council Meeting.—8 P.M. Dr. Francis Warner, "On a Case of Empyema treated by Antiseptic Drainage.'—Dr. F. C. Turner, "On a Case of Cerebral Hæmorrhage."
EPIDEMIOLOGICAL SOCIETY OF LONDON.—8 P.M. Dr. Cobbold, "On Filaria Sanguinis Hominis," sent by Dr. Wykeham Myers, Formosa; followed by a short paper of his own on the same subject.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by the President, Mr. Thornton, Dr. Percy Boulton, Mr. Oathwaite, and Dr. Herman.—Dr. Godson, "On Five Cases of Spasmodic Dysmenorrhœa associated with Sterility, successfully treated by Dilatation with Graduated Metallic Bougies."—Dr. Herman, "On a Case in which Dilatation of the Cervical Canal was followed by Removal of Sterility."—Mr. N. W. Jastreban, "On the Normal and Pathological Anatomy of the Ganglion Cervicale Uteri."—Dr. W. S. Playfair, "On Trachelo-raphé, or Emmet's Operation."

Thursday, Dec. 8.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—3½ P.M. Mr. R. J. Pye-Smith, "On a Case of Glaucoma cured by Eserine."—Dr. Gowers: (1) "On a Sequel to a Case of Cerebral Tumour;" (2) "On Two Cases of Optic Neuritis in Chorea;" (3) "On a Case of Axial Neuritis and Spinal Disease;" (4) "On a Case of Hemiopia in Locomotor Ataxy."—Mr. G. E. Wherry, "On a Case of Paralysis of the Fifth and Facial Nerves in a young Child."—Dr. Stephen Mackenzie, "On a Case of Acute Vascular Disease with Retinal Hæmorrhages."—Mr. Nettleship, "On a Case of Diabetic Cataract."—Mr. W. E. Fitzgerald, "On Unilateral Exophthalmos."—Living Specimens at 8 o'clock:—Mr. Mules: General Retinal Periarteritis. Mr. Nettleship: (1) Cystic Tumour of the Eyebrow; (2) Diabetic Retinitis. Mr. Cowell: Case of Retinitis Pigmentosa.
ABERNETHIAN SOCIETY (St. Bartholomew's Hospital).—Mr. S. Paget, "On Vegetable Pathology."
HARVEIAN SOCIETY.—8½ P.M. Second Harveian Lecture: Dr. Alfred Meadows, "On Menstruation and its Derangements."

Friday, Dec. 9.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON.—8½ P.M. Mr. W. H. Bennett, "On a Case of Talipes Equino-varus treated by Resection of a Portion of the Tarsus."—Mr. J. R. Lunn, "On Two Cases of Myxœdema, male and female."—Dr. Cavafy, "On Two Cases of Myxœdema."—Mr. W. H. Kesteven, "On a Case of Unilateral Xanthopsis (patient will be exhibited)."

Saturday, Dec. 10.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Dec. 1st, 1881.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Nov. 25	29·73	W.	54	53	..	55	47	·44	Raining
,, 26	29·65	W.	43	41	..	67	40	·11	Cloudy
,, 27	28·80	W.	47	45	..	52	44	·46	Raining
,, 28	30·09	W.	49	46	..	56	42	·17	Cloudy
,, 29	29·91	W.	40	39	..	48	36	..	Foggy
,, 30	30·21	S.W.	49	45	..	49	57	..	Overcast
Dec. 1	29·95	S.	46	45	..	47	43	·07	Raining

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

Local papers containing reports or news-paragraphs should be marked.

We cannot prescribe, or recommend practitioners.

Lectures, original articles, and reports should be written on one side only of the paper.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

HORSEFLESH IN LONDON SAUSAGES.

IT appears that the regulations in force at the horse-slaughtering establishments in the metropolis are of a nature to prevent anything like a direct supply of horseflesh to sausage-makers. At the same time there can be no reasonable doubt that horseflesh is largely used in the manufacture of sausages, particularly the so-called German sausages made in London. Horse and cattle dealers of the lower class are supposed to furnish the flesh used for this purpose; and it is especially from such sources of supply the worst class of meat is likely to be obtained. These small dealers buy casually and pick up bargains of worn-out and diseased animals, whose flesh finds its way into the hands of the sausage-makers. It is extremely probable that disease may be disseminated by this agency. The flesh is rather dried than cooked, and the germs it contains are therefore left in their unimpaired vitality. Eaters of sausage meat should beware; and German sausages especially ought to be excluded from every table on which only wholesome food is to be served. It is desirable to make this generally understood, because many persons who would not dream of eating London sausages of the common class consume without scruple the nastiness compressed into a dark-brown skin and sold as "German sausages," eating it uncooked, and, therefore, taking the morbid poison in a state of energy.

Qui meruit ferat Palmam.—Under the circumstances we think our correspondent is justified in making such a representation to the Local Government Board.

Mr. Herbert E. Dean.—Claret would be used for such a purpose. See THE LANCET, July 24th, 1880.

M.D.—1. Yes.—2. A convenient account of the island of Cyprus will be found in Murray's "Handbook of Turkey in Asia and Constantinople," or in the article "Cyprus," English Cyclopædia. But numerous works have been written on the subject since the British occupation, and will be found in any good library; moreover, much valuable material is to be obtained from the Parliamentary reports relating to the subject.

M. DÉCLAT.

FROM later American journals we learn that the surgeon referred to in the *Boston Medical and Surgical Journal* was M. Déclat, not M. Déclare, as mentioned by us last week. We believe it to be perfectly true that M. Déclat practised antiseptic surgery for several years before Mr. Lister published his first papers on the use of carbolic acid in wound treatment. But while the one failed to attract much attention and support even in his own country, the other has excited the interest and greatly modified the practice of surgeons in every civilised country. As in so many other cases, not he who first alights on an idea, but he who makes the best use of it, is most worthy of praise.

"EXCISION OF THE CANCEROUS UTERUS."

To the Editor of THE LANCET.

SIR,—In your annotation on the above subject you attribute to me the belief that in the majority of cases of uterine cancer the body of the uterus is involved before the cervix. Permit me to say that I made no such statement at the discussion on Mr. Spencer Wells's paper. What I do maintain is that in the comparatively rare cases of epithelioma, the old cauliflower excrescence, limited to the cervix, the disease could generally be more safely dealt with by Marion Sims's operation of excision, followed by the application of a caustic dressing of chloride of zinc of five drachms to the ounce. As a matter of fact, I have had most satisfactory results from this operation, one of my patients, the subject of the most extensive epitheliomatous growth from the cervix I ever saw, having lived for two and a half years in perfect health, and then dying from pneumonia. I have at the present time more than one patient under observation on whom I have operated without there being as yet a trace of the return of the disease. I believe this procedure to be much less hazardous than extirpation of the uterus, which it does not preclude should the disease recur. I distinctly said, however—and this was a point which some of the speakers who followed me failed to appreciate—that in the more common form of cancer—viz., medullary carcinoma, excision of the uterus was, in my judgment, a perfectly legitimate and the only resource, provided the case was seen and sufficiently diagnosed early enough, which unfortunately rarely happens.

I am, Sir, yours obediently,

George-street, Hanover-square, W., W. S. PLAYFAIR.
Nov. 20th, 1881.

*** We are glad to insert Dr. Playfair's correction of a not unnatural inference from his remarks as understood. We believe the majority of cases of carcinoma uteri to be epithelial in origin, and to commence in the cervix. Medullary cancer, strictly so called, is, we believe, rare, and seldom arises except primarily in the body of the organ. We quite admit the distinction between the more usual form of the cervical disease and the "cauliflower excrescence," which is as often papillomatous as epitheliomatous, at any rate in its early condition.—ED. L.

Senex.—Our correspondent is very unreasonable. Surely the clause in the Warrant, by which any medical officer who shall voluntarily retire before the age of fifty-five shall be liable to be called upon to serve in a case of national emergency until he shall complete the age of fifty-five, is one of which no true-hearted Englishman would complain. He forgets also the benefits in the shape of increased pay and retirement and the right of earlier retirement conferred upon him by the same Warrant.

Mr. Albert Field.—A case of the kind is noticed in THE LANCET of January 24th, 1880.

Mr. J. G. Sproston.—The desired information can be found in Sutton's "Volumetric Analysis," and in the Manuals of Water Analysis published by Frankland and by Wanklyn. The solution can, we believe, be procured from any dealer who sell chemicals for scientific purposes.

DARWIN ON WORMS.

To the Editor of THE LANCET.

SIR,—In your observations on the above subject, in THE LANCET, Oct. 22nd, you say "he does not think Hensen's estimate of 53,767 worms to an acre too high an estimate." Darwin does not seem to have calculated the number of worms himself. I therefore think that it might interest your readers if you could find space for the following:—

On October 31st, 1881, at Watford House (there had been enough frost to make ice as thick as a penny piece) at 9 A.M. the temperature was 28° F. The gardeners sifted a cubic yard of earth from—1st, the vine border, and took out 180 worms; 2nd, the old garden, and took out 160 worms; 3rd, the potato ground, which was a meadow last year, and found 130 worms; 4th, the meadow (poor land, a meadow for 100 years), and found 100 worms.—N.B. If there are 180 worms in three feet of earth there would be in an acre 871,200.

The weight of worms also is much greater than that mentioned in Mr. Darwin's book. I am keeping some worms in pots, but they as yet, eight days, have not done anything wonderful.

I remain, Sir, yours truly,

Watford House, Watford, Herts, ALFRED T. BRETT.
Nov. 8th, 1881.

A CASE OF INJURY TO THE SKULL.

To the Editor of THE LANCET.

SIR,—Permit me, through your columns, to ask if any of your readers would kindly inform me if they have ever heard, read of, or met with in their practices any case with results at all similar to the following, and if any particular form of treatment has been found successful in such cases.

A gentleman four years ago, proceeding at a rapid pace, tripped and fell heavily from the top to the bottom of a flight of stone steps, receiving a deep wound over the left external angular process of the frontal bone. He was picked up unconscious, and remained in a semi-conscious state for four days, when he was able to be removed to his home from the hospital to which he was at first conveyed. On his return home he again lapsed into a semi-conscious state, but again recovered gradually. At this time he was informed that there had been no fracture of the skull. However, since the accident he has been completely deaf on the right side, and there is a constant dropping of a perfectly clear, watery fluid from the left nasal cavity, twenty to thirty drops falling in the minute, and this without any cessation. If he hold himself with the head well thrown back the flow is diminished, as when in bed, and *vice versâ*, a stooping posture increases it. There is no increased lachrymal secretion, I may mention, observable, and the patient himself says that the flow appears to him to come "from the inner side and behind the eye." Local astringents have been tried without any effect. Besides the extreme discomfort it occasions, it prevents him from following his profession almost entirely. If any of your readers could inform me of or suggest any remedy likely to prove of benefit they would much oblige.

I am, Sir, faithfully yours,

Nov. 17th, 1881. SURGEON.

*** This case presents features of great interest; the fluid discharged is either cerebro-spinal fluid draining through a fracture in the cribriform plate of the ethmoid bone, in which case it will be found to contain a minute trace of sugar, or it is a watery fluid excreted from the lining of the nose or one of its adjoining cavities. Such a case was described by Sir James Paget in the Clinical Society's Transactions, where after death a polypus was found in the antrum. This specimen is now in the Hunterian Museum. We trust "Surgeon" will have some of the fluid collected and analysed, and report the result. The deafness evidently indicates some serious nerve lesion.—ED. L.

Mr. Hunter.—The publisher of the Index Medicus is Mr. Leypoldt, 13, Park-row, New York.

Mr. Forrester.—The paper has been received.

Tau has not enclosed his card.

Mr. W. A. Gilfillan.—The Royal College of Surgeons of Edinburgh gives its fellowship, without examination, on pecuniary terms, to persons who have already a licence in surgery and can produce ordinary testimonials.

W.—Probably in the beginning of January next year.

THE DIFFICULTIES ATTENDING CREMATION.

To the Editor of THE LANCET.

SIR,—In a recent issue of THE LANCET you drew attention to the more obvious difficulties that prevent the cremation of the dead. Those difficulties appear to be insurmountable, and are admitted by eminent American physicians who are otherwise favourable to incineration. The common mode of sepulture is undeniably most objectionable and reprehensible. Not only are cemeteries, to use the language of the Bishop of Manchester, "becoming a difficulty, an expense, and an actual danger;" they likewise interfere with the producing power of the soil, and that in perpetuity. The only mode that can be adopted to mitigate these evils consists in the general employment of the earth-to-earth system of burial, which Mr. Seymour Haden long since urged. In fact, this system really amounts to natural cremation, as Mr. Haden clearly demonstrates. Owing to the area of Woking Cemetery, Surrey, and the dry nature of its soil, the same authority contends that it is capable of receiving the mortality of Greater London for all time to come; and this allowing for the natural increase of population, while affording a separate grave for each body. Moreover, the "resolution" of the dead is effected without the ordinary processes of decay, which are not simply repulsive to think of, but are attended with manifest danger to the public health. If it be desirable to realise "the life-prolonging effect of a pure soil, pure water, and a pure atmosphere," to employ Mr. Haden's language, it is necessary that the public should discountenance and discard the use of solid coffins for the dead, and relinquish the practice of using overcrowded suburban cemeteries for interments. Some time since THE LANCET very properly pointed out the peril which threatened the metropolitan community owing to adjacent burial-grounds reeking with decomposed and putrefying matter. It is time that the public mind should be stirred up to the recognition of a very grave and pressing danger before it is too late to employ a remedy.

I am, Sir, yours truly,

Nov. 10th, 1881. EPSILON.

THE LORD CHANCELLOR ON FLOGGING.

WE are glad to find Lord Selborne in his official capacity giving a check to the ridiculous notion which has recently begun to prevail among the sentimental classes that it is wrong or harmful to use the birch moderately in the correction of boys of, say, under twelve years of age. We have repeatedly protested against this notion, as groundless and absurd. Boxing the ears, striking the hand with a ferrule, shaking children, keeping them without food, shutting them up in dark closets, rousing their angry passions and then placing them in solitary confinement, not alone, but shut up with the demon of a hideous and malignant consciousness; and even so seemingly mild a punishment as the imposition of a heavy or wearying brain-task,—are injurious, and in some instances dangerous, forms of chastisement. Meanwhile the birch as legitimately applied causes a smart without doing any injury. The Lord Chancellor rightly prefers the infliction of this penalty to the imprisonment of children of tender years. His preference is well founded, and we trust it will have weight with the administrators of justice and those upon whom the enforcement of domestic discipline devolves.

MEDICAL OFFICERS OF HEALTH AND MEDICAL ETIQUETTE.

To the Editor of THE LANCET.

SIR,—Will you or any of your readers kindly inform me whether the following procedure is usually the practice of medical officers of health: 1. To enter a house knowing that both the occupier and medical attendant were absent. 2. To question nurses, servants, charwomen, &c., as to diagnosis, means employed for disinfection, isolation, &c. 3. To enter sick rooms without giving due notice to the medical attendant. 4. To suggest means of disinfection to the Rural Sanitary Authority without asking whether such means had been previously employed.

I had always understood that the medical profession was one in which gentlemanly conduct was especially essential, and that a reticence with other men's patients was its distinguishing mark. However, my late experience seems to point to the fact that a medical man in an official capacity is not expected to observe those unwritten laws of professional etiquette which all gentlemen consider binding.

I am, Sir, yours faithfully,

Nov. 27th, 1881. GENERAL PRACTITIONER.

To the Editor of THE LANCET.

SIR,—If Dr. Fergusson has had cause to feel himself aggrieved I regret it. No mention was made to me of mere "presence armed with authority," nor was there the slightest use for it. The case was distinctly pressed upon me as one from which he claimed to be relieved.

I am, Sir, yours truly,

Peebles, Nov. 28th, 1881. THE SANITARY MEDICAL OFFICER.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—Allow me to correct an error which appears in your issue of to-day. Noticing the report of the medical officer of health for Manchester, you state that "the sanitary works which the corporation of Manchester have been engaged in during the decennial 69-79" include the erection "of a great hospital for infectious diseases, a hospital for sick children, other hospitals and dispensaries, a convalescent hospital, and a hospital for consumption." Although the work of the Health Committee of the corporation has been of the greatest public utility, and much of it far in advance of anything the metropolis can show, it has not been engaged in the erection of hospitals. What it has done, however, in this respect, is to make arrangements for the reception of all infectious cases of disease requiring removal either to the Children's Hospital at Pendlebury or to this hospital, and to contribute largely towards the support of both these institutions.—I am, Sir, yours faithfully,

HY. TOMKINS, M.D., Medical Superintendent.

Fever Hospital, Monsall, Manchester,
Nov. 26th, 1881.

THE ANTI-VIVISECTION SOCIETY.

To the Editor of THE LANCET.

SIR,—In your issue of Nov. 26th it is asserted, concerning our meeting at Wills's Rooms on Nov. 21st: "The influential and representative meeting was also informed officially that the Editor of THE LANCET had last week stated that no good had accrued to medicine from vivisection!"

I hope your sense of honour and justice will allow me to give in your columns the most unqualified contradiction to the above assertion. Your own journal excepted, no such statement, I believe, occurs in any of the numerous London newspapers that have reported the meeting. What I did say was this: "The Editor of the leading medical journal of England—THE LANCET—stated in a leading article last Saturday that 'the part of physiological research which depends on vivisection is being gradually stamped out.'"

I remain, Sir, your obedient servant,

Nov. 29th, 1881. GEORGE R. JESSE, Hon. Sec.

*** The quotation from our columns ought to have been given in its complete form, and should be read in the light of the remarks with which it is connected in the article in which it appears.—ED. L.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Butlin, London; Dr. Playfair, London; Dr. Mahomed, London; Dr. Clement Dukes, Rugby; Dr. Tomkins, Manchester; Mr. Treves, London; Mr. Nettleship; Dr. Bartlett; Mr. Wigner; Mr. Jesse, Henbury; Mr. Stanger, Nottingham; Dr. H. Barnes, Carlisle; Mr. Rogers, London; Dr. Reid, Newbiggin; Dr. Roulston, Rotherhithe; Dr. Gunn, Dundee; Mr. Campbell; Mr. Herman Weber, London; Mr. Bain, Mysore; Mr. Hunter, London; Surgeon-Major Ikin, Leeds; Dr. Evatt; Mr. Cotton, Ramsgate; Mr. Slater, London; Mr. Hopkins, London; Mr. Gilligan, Blackrock; Mr. Burton, Liverpool; Mr. James Allen, Leeds; Mr. T. Daniell, Chelsea; Mr. Judge, London; Mr. Shirley Murphy, London; Mr. Mulvany, Portsmouth; Dr. Jay, Shandon; Mr. Cosburn, Newbury; Mrs. Scott, Manchester; Mr. Barroughs, Long Bennington; Mr. Thorley, Bridlington; Messrs. Wood and Co., New York; Mr. De Denne; Dr. Coates, Sirhowy; Mr. Malcolm, London; Dr. Dunlop, Jersey; Mr. Merriman; Dr. Paul Rodet, Paris; M.D.; An American; Qui meruit ferat Palmam; K. C.; C. D. M.; Vera; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Alsop, Manchester; Mr. Jackson, Nottingham; Mr. Coltman, Leicester; Mrs. Thomas, Tottenham; Mr. Rigby, Preston; Mr. Cecil, Gloucester; Mr. Walker, Middlesboro'; Mr. Bennett, Okehampton; Mr. Ryan, London; Mr. Cosburn, Newbury; Miss Markham, Portsmouth; Mrs. Ross, Brighton; Mr. Hine, Ilminster; Mr. Jesse, Macclesfield; Mr. Hitchins, Scorrier; Mr. Brandell, Norwich; Mr. Baron, Ulceby; Mr. Allsop; Mr. Browne, Douglas; Dr. Withington, Fort Augustus; Dr. Otis, New York; Mr. Markham, Portsmouth; Mr. Kerr, Glasgow; Mr. Harricks, Queensland; Mr. Butterworth, Hollinwood; Mr. Barr, Liverpool; Mr. Kinder, Leicester; Mr. Raynes, Gringley-on-the-Hill; Mr. Donkin, Glasgow; W. J., Tunbridge Wells; Millwood; Xema; R. A., Birmingham; L. D. S., Sevenoaks; Vectis, Haverstock-hill; Alpha; M. S.; B. B.; E. A. B., Clun; W. B. C., London; G.; Zeta, London; L. F. P. S.; Puck; X. Z., York; Medicus, Lancaster; E., Liverpool; Clericus, Fulham; X. Y. Z.; S. B., Birmingham; Medicus, Camberwell; H. Y.; A. W. Y.; B. Y.; M. J. D.; &c., &c.

Sunderland Daily Echo, Cuckoo, Liverpool Daily Courier, Perthshire Constitutional and Journal, Asylum Journal, Revista Frenopatica Barcelonesa, Keene's Bath Journal, Halifax Guardian, Western Daily Press, North Wales Chronicle, The Zoophilist, Sunderland Weekly Echo, &c., have been received.

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